

**THE EFFECTS OF ETHICAL CONTEXT AND BEHAVIOUR ON JOB RETENTION AND  
PERFORMANCE-RELATED FACTORS**

By

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## **DECLARATION**

I, Jeremy Mitonga-Monga, student number 45019916, hereby declare that this thesis entitled **“The effects of ethical context and behaviour on job retention and performance-related factors”** is my own work, and that all the sources that I have used and quoted have been indicated and acknowledged by means of a complete list of references. I declare that the thesis has not in part or in whole been previously submitted for any other degree or examination at this or any other university.

I further declare that ethical clearance to conduct the research has been obtained from the Department of Industrial and Organisational Psychology, University of South Africa. Permission to conduct the research was obtained from the participating organisations. I also declare that the study was carried out in strict accordance with the Unisa Policy on Research Ethics and that I conducted the research with the highest integrity during all phases of the research process, taking into account Unisa’s Policy on Copyright Infringement and Plagiarism.

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## ABSTRACT / SUMMARY

### THE EFFECTS OF ETHICAL CONTEXT AND BEHAVIOUR ON JOB RETENTION AND PERFORMANCE-RELATED FACTORS

by

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The purpose of the study was to develop an ethical context and behaviour model by investigating the relationship between individuals' ethical context and behaviour variables and their job retention and performance related-factors, which has been under-researched in the Democratic Republic of Congo's working environment. A quantitative cross-sectional survey approach was followed in this study. The population consisted predominantly of a non-probability sample of (N=839) permanently employed employees in an organisation in this country. The results revealed significant relationships between the construct variables. Structural equation modelling indicated a good fit of the data with the canonical correlations-derived measurement model. The main findings are reported and interpreted in terms of an empirically-based ethical context and behaviour model. These findings may provide new knowledge for the design of retention and performance practices which add to the body of knowledge in relation to ethical context and behaviour, job retention and performance.

**Keywords:** ethical context and behaviour, job retention and performance factors, ethical culture, ethical climate, ethical leadership, work engagement, job satisfaction, organisational commitment, OCB.

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## **CHAPTER 1: SCIENTIFIC OVERVIEW OF THE RESEARCH**

This study focuses on constructing and testing a model on the relationship between ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership), job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour), and biographical characteristics (measured as age, gender, educational level and job tenure) in a railway organisation context in the Democratic Republic of Congo (DRC).

This chapter provides the background to and motivation for the study, which flow into the formulation of the problem statement and research questions. From the aforementioned, the aims of the study will subsequently be presented. The paradigm perspectives which guide the research are also discussed, as well as the research design and methodology, with its different steps which give structure to the research process, are described. Finally, an outline is given of the chapters in the study.

### **1.1. BACKGROUND TO AND MOTIVATION FOR THE STUDY**

The context of this research is employee retention and performance in the railway industry in the DRC's organisational context. More specifically, this study focuses on developing a model comprising those ethical context and behaviour variables and job retention and performance-related factors that may positively and potentially influence the psychological and emotional attachment and performance of employees. The constructs of relevance to this study are: (1) ethical context and behaviour (conceptualised as mentioned; and (2) job retention and performance related-factors (conceptualised as indicated).

Employee retention and performance related factors are important for organisational competitiveness (Moon & Choi, 2014), and this may well depend on how individuals (employees) perceive the organisation's ethical culture, climate and ethical leaders. Business ethics refers to the principles and moral or ethical problems that arise in a business environment (Treviño & Nelson, 2010). Employee retention denotes the effort by an organisation to keep desirable, highly skilled and high-performing employees in order to meet the business goals (Kumari & Chauhan, 2013), while performance refers to the degree of achievement to which an employee fulfils the organisational mission, its goals at the workplace (Awadh & Saad, 2013). Ethical context and behaviour encompasses those

organisational resources that stimulate ethical conduct, influence employee behaviour towards policies, procedures and practices with moral consequences (Demirtas & Akdogan, 2014; Huhtala, Feldt, Hyvönen & Muano, 2013), and show consistency with appropriate norms which are visible through leaders' actions and relationships (Brown, Treviño, & Harrison, 2005; Demirtas & Akdogan., 2014). There is evidence to suggest that organisations with higher ethical context and behaviour (organisational ethical culture, ethical climate and ethical leadership) attract and retain talented employees (Chabault, Hulin & Soparnot, 2012).

According to Govaerts, Kyndt, Docky and Baert (2010), employee retention and performance are influenced by various factors: compensation for and appreciation of work done well, opportunities for advancement, responsibilities, managerial integrity, and relationships with colleagues and good communication within the organisation. Researchers and scholars have found that though these various factors do influence retention and performance of staff, there is little understanding of the mechanisms through which other organisational resources such as ethical context and behaviour influence turnover intention and productivity of employees (Bello, 2012; Kaptein, 2011). Previous research has separately established ethical context and behaviour (conceptualised as mentioned) to predict job retention and performance factors (conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour) (Baker, 2007; Deshpande, 1996; Deshpande, Georges & Joseph, 2000; Elçi & Alpkın, 2009; Huhtala, Feldt, Lämsä, Muano & Kinnunen, 2011; Yener, Yaldiran & Ergun, 2012). Combined studies are needed on the relationship between ethical context and behaviour and job retention and performance related-factors in the developing world context to further clarify the influence that ethical context and behaviour constructs could have on the retention and performance of staff. The organisational resources such as ethical context and behaviour and job retention and performance related-factors, as well as the extent to which these relationships are sustained in a developing country world setting such as the DRC, is unknown.

The DRC is situated in central Africa with a population of 75+ million and an abundance of natural resources estimated at 35 trillion US dollars. Despite these resources, the DRC remains one of Africa's poorest countries, mainly because of political conflict, hyperinflation, mismanagement, corruption and unethical behaviour (Baya, 2012). At present, the country desperately needs to speed up institutional, economic, political and social reforms to ensure stability, peace and growth and to reduce the high level of corruption and unethical behaviour (African Development Bank Report, 2013). The transportation sector of the DRC

is no exception to the economic challenges which could in part be enhanced by a work environment embracing positive ethics behaviour. The transportation system in the DRC provides railroads, waterways and roads across the country. Since independence, the railway services have deteriorated – locomotives have broken down, the rail beds are poor and commuter services are unreliable. Recent efforts by the World Bank and the African Development Bank to address engineering and human resources issues (such as poor remuneration) have made little progress because of mismanagement, corruption, unethical practices and poor work performance (African Development Bank Report, 2013). It is believed that these factors negatively influence employees' intention to stay and their productivity. It is unclear in this context how ethical context and behaviour impact on staff retention and performance. Specifically, the relationship between ethical context and behaviour and the job retention and performance related-factors in this sector need to be studied.

The purpose of this study is consequently to investigate the relationship between ethical context and behaviour constructs that influence the job retention and performance related-factors of employees in a railway organisation in the Democratic Republic of Congo context.

The question as to what causes individuals to stay longer with the organisation and perform more than others therefore arises. To answer this query, researchers need to conduct further research that will help to develop meaningful employee retention and performance strategies within the organisation. In this contemporary world of work, organisations need to take cognisance of organisational context factors that could attract employees. Coetzee, Mitonga-Monga and Swart (2014) found that best practices, such as organisational culture, were significantly related to individual's job satisfaction, engagement, and organisational commitment. Apart from these practices, the business ethics literature also increasingly focuses on those ethical context and behaviour variables that potentially influence the levels of employees' satisfaction, engagement, commitment and citizenship behaviour, as well as their retention and performance.

Gender, age, education and tenure appear to significantly influence an individual's perception of ethical context and behaviour, and job retention and performance. With regard to gender, Sweeney, Arnold and Pierce (2010) found statistical differences between males and females in their overall ethical culture. Females were more likely to report ethical intentions than males (Beu, Buckley & Sweeney, 2003). Females also tended to be more

concerned about ethical issues, while males reported that they were more likely to engage in unethical behaviour than females (Gilligan, 1982).

With regard to age, a person who is older tends to possess stronger ethical beliefs, and is less likely to be influenced by people around them at work and at home. Other studies conducted by Douglas, Davidson and Schwarts (2001) found no relationship between age and perceived ethical culture. There is also some evidence which suggests that people who are highly educated are more likely to engage in ethical behaviour than their less educated counterparts (Yener et al., 2012). Moreover, Victor and Cullen (1988) found that tenure has a positive effect on ethical climate and ethical behaviour.

There seems to be a paucity of literature containing evidence to support the idea that ethical context and behaviour is related to job retention and performance related-factors (Kaptein, 2011). In recent years, there has been a great deal of interest in job retention and performance factors. Many researchers have claimed separately that ethical context and behaviour variables such as ethical culture, ethical climate and ethical leadership predict an employee's turnover intention and performance (Bates, 2004; Richman, 2006; Saks, 2006).

From the practical point of view, this study is premised on the need to provide DRC organisations with an integrative model for understanding the effects of the ethical context and behaviour variables on the job retention and performance-related factors. The practical relevance of this study emanates from the lack of a clear framework for organisational retention and performance practices. Rai (2011) urged researchers and academia to establish an appropriate ethical context and behaviour model which could reduce the turnover intention rates and resolve the issues of poor performance encountered by organisations.

This study seeks to bridge the gap by proposing a model for understanding the effects of the ethical context and behaviour variables, such as ethical culture, ethical climate and ethical leadership, on job retention and performance related-factors, such as employee engagement, job satisfaction, organisational commitment and organisational citizenship behaviour. Scholars have called on researchers to integrate more approaches into ethical culture, ethical climate and ethical leadership, as well as psychological, attitudinal and behavioural outcomes, in order to understand retention and performance issues in the organisation (Parboteeah, Chen, Lin, Chen, Lee & Chung, 2010).

Nevertheless, theoretical models do not clarify the relationship between ethical context and behaviour, and job retention and performance related-factors. Instead, the focus has generally been placed on the relationship between ethical context, such as ethical climate or ethical culture, and work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour. No effort has been made to develop a model to help academics and practitioners understand the effects of ethical context and behaviour on job retention and performance related-factors. The ethical context and behaviour variables are found to be important organisational resources in shaping employees' behaviours and attitudes. Victor and Cullen, cited in Erben and Guneser (2008), argue that ethical context and behaviour variables influence employees' behaviour, attitudes and actions, because they provide information about the organisation and the appropriate way in which the work should be done.

Kaptein (2008) proposes that future research is therefore needed in different companies, countries and continents. This study attempts to investigate these aspects, which are lacking in the existing literature. This will be achieved by developing a model for understanding the effects of ethical culture, ethical climate and ethical leadership (as a composite set of ethical context and behaviour variables) on work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour (as a composite set of job retention and performance related-factors), using a sample of employees within work environment settings, rather than using a sample of students. If significant relationships between the proposed variables exist, human resource managers and practitioners may consider this relevant information when developing retention and performance strategies for staff.

## **1.2. PROBLEM STATEMENT**

In view of the above, a review of the current literature on ethical culture, ethical climate, ethical leadership, work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour highlights the following research problems:

Theoretical models do not clarify the relationship between ethical culture, ethical climate, and ethical leadership (as a composite set of ethical context and behaviour variables) and employee engagement, job satisfaction, organisational commitment and organisational citizenship behaviour (as a composite set of job retention and performance related-factors), in the context of an ethical context and behaviour model within the railway organisational context. Human resource practitioners, industrial and organisational psychologists and

academia need knowledge about the nature of both the theoretical and observed relationship between these variables. The knowledge that may be gained from this research may add value and inform organisational retention and performance strategies.

Although the constructs of interest to the present study have been well established in the literature in Western countries, subsequent studies on the relationship between these constructs have not yet been conducted in the DRC's railway organisational context. In this regard, the present study is new in its approach, and should contribute to the organisational ethics, retention and performance related-factors literature.

The problem statement gave rise to the following general research question, from which the specific research questions outlined below were derived:

What are the relationships between individuals' perceived ethical culture, ethical climate and ethical leadership (as a composite set of ethical context and behaviour variables) and work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour (as a composite set of job retention and performance related-factors), and can an ethical context and behaviour model be constructed to inform retention and performance practices in the DRC's organisational context?

From the above, the following research questions can be formulated in terms of the literature review and empirical study:

### **1.2.1. Research questions with regard to the literature review**

In terms of the literature review, the specific research questions are as follows:

**Research question 1:** How is the ethical context behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership) conceptualised and explained by theoretical models in the literature?

**Research question 2:** How are the job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour) conceptualised and explained by theoretical models in the literature?

**Research question 3:** What is the nature of the theoretical relationship between the ethical context and behaviour job retention and performance related-factors, and biographical characteristics (measured as age, gender, educational level and job tenure)?

**Research question 4:** Can a scientific theoretical model be constructed on the relationship between the ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership), job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour), and biographical characteristics?

**Research question 5:** What are the theoretical implications of the ethical context and behaviour model for retention and performance practices?

### **1.2.2. Research questions with regard to the empirical study**

In terms of the empirical study, the specific research questions are as follows:

**Research question 1:** What is the nature of the statistical interrelationship between the ethical context and behaviour and the job retention and performance related-factors, as manifested in a sample of respondents in a typical D R C organisational setting?

**Research question 2:** What is the nature of the overall statistical relationship between the ethical context and behaviour set of independent latent variables (ethical culture, ethical climate and ethical leadership), and the job retention and performance related-factors construct set of dependent latent variables (work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour)?

**Research question 3:** Do the variables of the ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) positively and significantly predict the job retention and performance related-factors (work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour)?

**Research question 4:** Based on the statistical relationship between ethical context and behaviour and its variables (ethical culture, ethical climate, and ethical leadership), and the job retention and performance related-factors and their variables (work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour), is there a

good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model?

**Research question 5:** Do the biographical characteristics significantly moderate the relationship between the ethical context and behaviour and its variables and the job retention and performance related-factors and their variables?

**Research question 6:** Do significant differences exist between the sub-groups of biographical characteristics that acted as significant moderators between the ethical context and behaviour and the job retention and performance related-factors, as manifested in the sample of respondents?

**Research question 7:** What recommendations can be made for organisational retention and performance in the railway organisational context, and what suggestions can be made for possible future research based on the findings of this study?

### **1.3. AIMS OF THE RESEARCH**

From the above research questions, the following aims were formulated:

The general aim of this research is to construct and test a model on the relationship between ethical context and behaviour variables, job retention and performance related-factors, and biographical characteristics.

The following are the specific aims of the literature review and empirical study:

#### **1.3.1. Specific aims in terms of the literature review**

In terms of the literature review, the specific aims are as follows:

**Research aim 1:** To theoretically explore ethical context and behaviour variables conceptualised as consisting of ethical culture, ethical climate and ethical leadership and the variables that influence these constructs.

**Research aim 2:** To theoretically explore job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and organisational commitment and OCB and the variables that influence these constructs.

**Research aim 3:** To explore the theoretical relationship between ethical context and behaviour variables, job retention and performance related-factors, and biographical characteristics.

**Research aim 4:** To construct a theoretical model on the relationship between ethical context and behaviour variables, job retention and performance related-factors, and biographical characteristics.

**Research aim 5:** To critically evaluate the implications of the ethical context and behaviour model for retention and performance practices in the railway organisational context.

### **1.3.2. Specific aims in terms of the empirical study**

In terms of the empirical study, the specific aims are as follows:

**Research aim 1:** To empirically assess the nature of the statistical interrelationship between the ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership) and the job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), as manifested in a sample of respondents in the railway organisation DRC.

**Research aim 2:** To empirically assess the nature of the overall statistical relationship between the ethical context and behaviour set of independent latent variables (ethical culture, ethical climate and ethical leadership), and the job retention and performance related-factors set of dependent latent variables (work engagement, job satisfaction, organisational commitment and OCB).

**Research aim 3:** To empirically assess whether or not the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership positively and significantly predict the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

**Research aim 4:** Based on the overall statistical relationship between the ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership) and the job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), to determine whether there are a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

**Research aim 5:** To empirically assess whether or not biographical characteristics ( age, gender, educational level and tenure) significantly moderate the relationship between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

**Research aim 6:** To empirically assess whether or not significant differences exist between the sub-group of biographical characteristics that acted as significant moderators between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as manifested in the sample of respondents.

**Research aim 7:** To draw conclusions based on the findings and make recommendations for organisational retention and performance practices in an organisational context and for future research based on the findings of this study.

#### **1.4. STATEMENT OF SIGNIFICANCE**

Ethical context and behaviour, conceptualised as mentioned, appear to have an influence on job retention and performance related-factors. No integrated theoretical and empirical model explaining the relationship between the ethical context and behaviour variables and the job retention and performance related-factors has been developed yet. This research is an original starting point for an investigation into the relationship between ethical culture (as defined by Kaptein, 2008), ethical climate (as defined by Victor & Cullen, 1998), ethical leadership (as defined by Kalshoven, Den Hartog & De Hoogh, 2011), and work engagement (as defined by Schaufeli et al, 2002), job satisfaction (as defined by Vitell & Davis, 1990), organisational commitment (Meyer & Allen, 1997), and organisational

citizenship behaviour (as defined by Organ, 1988), and how these constructs manifest themselves in the Democratic Republic of Congo organisational context.

This study could contribute to the field of industrial and organisational psychology in three distinct areas: theoretical, methodological and practical.

#### **1.4.1. Potential contribution on a theoretical level**

From the theoretical standpoint, this study may prove useful in detecting the relationships between the ethical context and behaviour (conceptualised as independent construct of ethical culture, ethical climate and ethical leadership) and the job retention and performance related-factors (conceptualised as dependent constructs of work engagement, job satisfaction, organisational commitment and organisational citizenship). If a significant relationship is proved, then the findings will be useful in the development of a theoretical ethical context and behaviour model for the retention and performance of staff that can be empirically tested.

#### **1.4.2. Potential contribution on an empirical level**

On an empirical level, the research may contribute by developing an empirically tested model on the relationship between ethical context and behaviour and job retention and performance that could be used to inform retention and performance practices. If relationships are not found between variables, then the importance of this study is limited to the elimination of ethical culture, ethical climate and ethical leadership, work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour as organisational resources and retention and performance related-factors in a railway organisational context, and efforts can be directed to other research studies and avenues that could effectively address the issue of retention and performance in an organisational context.

Furthermore, the study may indicate whether individuals of different ages, genders, educational levels and tenure sub-groups differ in terms of their perception of ethical context and behaviour variables, as well as job retention and performance related-factors. As the current working environment is characterised by cultural diversity, the findings may be useful in the development of an empirically tested model on the relationship between ethical

context and behaviour and job retention and performance related-factors by detecting differences in terms of biographical information.

### **1.4.3. Potential contribution on a practical level**

At the practical level, industrial and organisational psychologists, and human resource practitioners may develop a better understanding of ethical culture, ethical climate and ethical leadership, work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour that could influence the retention and performance of workers. Consequently, if this could be done, the outcomes would be sufficient to justify the continuing relevance of this study. The positive results from the proposed research could raise awareness of the fact that individuals in the working environment differ in terms of organisational resources, ethical culture, ethical climate, ethical leadership, employee engagement, job satisfaction, organisational commitment and organisational citizenship, and this may inform retention and performance practices in the working environment.

Where associations between the constructs are found, the findings may help future researchers in exploring the possibility of resolving the issues of turnover intention and poor performance in the DRC organisational context. Moreover, the research findings may contribute to the body of knowledge on the ethical context and behaviour and retention and performance factors that influence turnover and performance in the railway organisational context.

This research is original in that there is no existing study on the relationship between ethical culture, ethical climate and ethical leadership and work engagement, job satisfaction, organisational commitment and organisational citizenship. Studies on the integrative overall relationship between these constructs are also lacking, as is research on the development of an ethical context and behaviour model based on this constellation of variables, especially in the DRC's emerging organisational context (Kalshoven et al., 2011; Kaptein, 2008; Victor & Cullen, 1987).

## **1.5. THE RESEARCH MODEL**

A research model generally follows a research philosophy and is associated with a particular type and design of research. This study will adopt part of Mouton and Marais' (1996) research model framework. According to Bryman (2012), this model is based on the

philosophical conviction that sociological, ontological, teleological, epistemological and methodological dimensions exist. Of the five components of the model, the sociological dimension conforms to the requirements of the sociological research ethic, which utilises the research community as its source of theory development. The ontological dimension encompasses that which is investigated in reality, while the teleological dimension suggests that the research should be systematic and goal-directed. The epistemological dimension relates to the quest for truth, whereas the methodological assumptions are beliefs about the nature of social science and scientific research.

## **1.6. PARADIGM PERSPECTIVE OF THE RESEARCH**

According to Kuhn (1970), a paradigm is an object for further articulation and specification under new or more stringent conditions. The same author indicates that this is followed by the proliferation of competing articulations, willingness to try anything, expression of explicit discontent, recourse to philosophy, and a debate about fundamentals. A paradigm is perceived as a constellation of concepts, values, perceptions and practices shared by a community of practitioners, which forms a particular vision of reality that is the basis of the way in which a community organises itself (Kuhn, 1970). This study is related to the fields of psychology and industrial and organisational psychology, as well as the sub-discipline of organisational psychology.

### **1.6.1. The intellectual climate**

A literature review will be presented from the perspective of humanistic, behaviourist and open-systems paradigms, and the empirical study from the perspective of the positivist research paradigm.

#### *1.6.1.1. Literature review*

The literature review will be undertaken from the following paradigmatic perspectives:

#### *1.6.1.2. Humanistic paradigm*

According to Hoffman, Lopez and Moats (2013), the basic assumptions of the humanistic paradigm are as follows:

Human beings are positive and motivated by the need to grow and realise their fullest potential. They fail to reach their potential because of the environment and situational deterrence. Human beings are not passive, but have the freedom to engage in behaviour that positively determines their purpose. Individuals are not victims of events but are purposive, having the freedom to determine their destiny in a positive way.

Human beings are dignified and should be studied as an integrated whole. This is because the humanistic paradigm subscribes to the holistic approach to human existence, by focusing on people's freedom, values, potential, and meaning of life, personal responsibility and self-actualisation.

When applied to business ethics, human beings have the desire to comply with values, rules, procedures and regulations as a way of discouraging unethical behaviour and promoting ethical behaviour and work engagement.

Thematically, the humanistic paradigm relates to the ethical context and behaviour variables (conceptualised as described earlier), and job retention and performance related- factors (conceptualised above).

#### *1.6.1.3. Behaviourist paradigm*

According to Bergh and Theron (2013), behaviourism was pioneered by John Watson and involved the control and prediction of observable behaviour by manipulating the environment to create associations in the human mind. This paradigm is based on the assumption that human behaviour can be objectively observed, studied and measured when the subject interacts with the environment. It postulates that an individual's behaviour is directly related to stimuli in the environment, that behaviour develops and maintains its strength through a system of rewards or reinforcements, and that punishment and behaviour change must also be relevant to individuals (Hutchison, 2008; Pastorino & Portillo, 2006; Punch, 2005; Weiten, 2007). This paradigm will link to the constructs of ethical leadership and organisational citizenship behaviour.

#### *1.6.1.4. Positive psychology paradigm*

The positive psychology paradigm has its essence or roots in humanistic psychology (Resnick, Warmoth & Serlin, 2001), which studies the entire functioning person (Rogers,

1961). Positive psychology is perceived as a science of positive subjective experiences as positive traits and positive institutions, such as democracy, organisations and family (Seligman & Csikzentmihlyi, 2000). Positive psychology articulates a vision of optimal living by sharing those actions which lead to positive individuals (Spencer & Rathus, 2005). This paradigm will link to the constructs of ethical culture, ethical climate, as well as work engagement.

#### 1.6.1.5. *Positivist paradigm*

The empirical findings of this study will be approached from the perspective of the positivist research paradigm. In this regard, the objective of the study is independent of researchers, and knowledge is discovered and verified through direct observations or measurements of phenomena (Krauss, 2005). According to Bryman (2012), the phenomenon is analysed by taking it apart to examine the components of the parts, in order to establish the facts. Epistemologically, positivists perceive science as a way in which to discover the truth, so that it can be understood well enough to be predicted and controlled (Bryman, 2012).

Positivists believe in empiricism – the idea that observation and measurement are at the core of any scientific endeavour. According to Hammersley (2012), the positivist research paradigm seeks to explain, clarify and predict what happens in the social world by searching for regularities and causal relationships between its basic parts. Social scientific knowledge is considered to be real, ordered and stable, basic patterns that are better than common sense (Bryman, 2012). Bryman (2012) indicates that social science found its essence in the tradition of positivism, which believes that scientific theories can be objectively supported by means of empirical evidence. This paradigm is crucial to this study because it attempts to draw objective conclusions by minimising errors through statistical data analysis.

The empirical study in this research is in the form of a quantitative study (Bryman, 2012), and will be conducted within the assumptions of the positivist research paradigm. Thematically, the quantitative study focuses on the relationship between ethical context and behaviour variables, and job retention and performance related-factors. The study provides quantitative measures of those constructs that have a concrete and tangible value through the use of statistical science and techniques. This quantitative approach is perceived as objective and relating to conditions that are independent of individual thought and perceptible to all observers, by relying on statistical procedures (Bryman, 2012).

## **1.6.2. The market of intellectual resources**

The market of intellectual resources refers to the collection of beliefs that have a direct bearing on the epistemological states of scientific statements (Mouton, 1996). For the purpose of this study, the theoretical models, meta-theoretical statements, conceptual descriptions of the ethical context and behaviour and job retention and performance related-factors, central hypothesis and theoretical and methodological assumptions will be described in this section.

### *1.6.2.1. Meta-theoretical statements*

Meta-theoretical statements represent an important category of assumptions underlying the theories, models and paradigms of research. In the disciplinary context, this study focuses on industrial and organisational psychology as a field of application (Mouton, 1996; Salkind, 2012). Meta-theoretical statements are presented as follows:

#### *a) Industrial and Organisational Psychology*

This study is presented in the context of industrial and organisational psychology, which is defined as the application of psychological principles and research to the work environment. According to Van Vuuren (2010), it includes a study of the factors that influence work behaviour, such as socio-cultural influences, employment-related legislation, personality, gender, race and life-span development. This study constructs a model for understanding the effects of ethical context and behaviour on job retention and performance related-factors.

An industrial and organisational psychologist facilitates responses to issues and problems involving people at work, by serving as an advisor and catalyst for business, industry, and labour, the public, academic community, and health organisations. Such a psychologist is a scientist who derives principles of individual, group and organisational behaviour through research; a consultant and staff psychologist who develops scientific knowledge and applies it to solving problems at work; and a teacher who trains others in the research and application of industrial and organisational psychology (Van Vuuren, 2010).

### *b) Organisational Psychology*

The sub-disciplinary aspect on which this study is focused is organisational psychology. Spencer (2005) defines this as the study of the behaviour of people in business, corporate, professional and educational organisations. According to Ivancevich, Konopaske and Matteson (2013), organisational psychology is the study of human behaviour, attitudes and performance within an organisational setting. This sub-discipline draws its theory, methods and principles from disciplines such as psychology, sociology and cultural anthropology. Organisational psychology is concerned with work organisations as systems involving individual employee work groups, as well as the structure and dynamics of organisations. It includes fields within organisational theory and models, leadership and decision-making, organisational development, organisational culture, employment relations and, more recently, analyses the effects of the external environment on the organisation, human resources, missions, objectives and strategies (Bergh & Theron, 2009). The importance of studying organisational psychology is that this field is performance-oriented and improves productivity in organisations (Ivancevich et al., 2013). Thematically, the ethical context and behaviour (already conceptualised), and the job retention and performance factors (conceptualised earlier) are applicable to this study.

### *c) Psychometrics*

This branch of psychology refers to the study of the theory and practice of psychological measurement, such as the development and standardisation of psychological tests and related statistical procedures (Gregory, 2013). Psychometrics positions a researcher in such a way that he or she is able to measure behaviour in various forms, providing different explanations for inter- and intrapersonal functioning. In this study, questionnaires are used to measure individuals' ethical context and behaviour variables and job retention and performance related-factors.

#### *1.6.2.2. Theoretical models*

In this study, theoretical models will be presented in the following manner:

a) *The ethical context and behaviour variables*

Literature on the ethical context and behaviour variables, such as ethical culture, climate and ethical leadership, will be reviewed from a behavioural perspective. Kaptein's (2008) ethical culture, Victor and Cullen's (1998) ethical climate, and Brown, Treviño and Harrison's (2005) ethical leadership models will be discussed in this regard.

b) *The job retention and performance related-factors*

With regard to work engagement, Maslach and Leiter's (1997) and Schaufeli, Bakker and Salanova's (2006) models will be discussed. In terms of related variables, Lock (1976) job satisfaction, Meyer and Allen's (1997) organisational commitment and Organ's (1988) organisational citizenship behaviour models will be applied to this study.

1.6.2.3. *Conceptual descriptions*

The following conceptual descriptions serve as points of departure for discussions in this study:

a) *The ethical context and behaviour variables*

In this study, the ethical context and behaviour variables are described in terms of the following constructs:

i) *Ethical culture*

Ethical culture refers to the subset of organisational culture that represents a multidimensional interplay between various formal and informal systems of behaviour control, which are capable of promoting ethical or unethical behaviours (Treviño, Butterfield & McCabe, 1998; Kaptein, 2008).

ii) *Ethical climate*

Based on various definitions of ethical climate provided in the literature, for the purpose of this study, ethical climate is defined as "an organisation's shared perceptions of what

ethically correct behaviour is and how ethical issues should be handled” (Victor & Cullen, 1987: 51-52).

*iii) Ethical leadership*

Ethical leadership is defined as the demonstration of appropriate conduct to followers through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making (Brown, Treviño & Harrison, 2005; Kalshoven et al, 2011).

*b) The job retention and performance-related factors*

In this study, the job retention and performance related-factors are described in terms of the following constructs:

*i) Work engagement*

Work engagement refers to the positive, fulfilling and motivational-psychological state of mind characterised by vigour, dedication and absorption (Schaufeli, Bakker & Salanova, 2006). Vigour is characterised by a high level of energy and mental resilience while working, and a willingness to invest effort in one’s work despite adversity. Dedication refers to being immersed in one’s work and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge, while absorption is characterised by concentrating fully on and being happily engrossed in one’s work, resulting in time passing quickly and an inability to detach oneself from one’s work (Coetzee & Rothmann, 2007).

*ii) Job satisfaction*

The most popular definition of job satisfaction is provided by Locke (1976), who defines job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one’s job experience. This definition consists of both cognitive (an appraisal of one’s job) and affective (emotional state) elements, denoting the degree to which individuals feel positive or negative about their jobs.

*iii) Organisational commitment*

Based on various definitions of organisational commitment provided in the literature, for the purpose of this study, such commitment is defined as the cognitive predisposition or existing strength of identification between an individual and an organisation (Meyer et al., 1997).

*iv) Organisational citizenship behaviour*

Organisational citizenship behaviour (OCB) refers to work-related behaviours that are discretionary, not related to the formal organisational reward system, and which, in general, promote the effective functioning of the organisation (Organ, 1988).

*1.6.2.4. Central hypothesis*

The central hypothesis of this study can be formulated as follows:

The constructed and tested model explains the relationship between ethical context and behaviour variables (defined earlier), job retention and performance related-factors (defined above), and biographical characteristics (previously defined) that may be used to inform organisational retention and performance practices.

*1.6.2.5. Theoretical assumptions*

Based on the literature review, this study addresses the following theoretical assumptions:

There is a need for research that seeks to integrate the ethical context and behaviour and the job retention and performance related-factors.

The biographical characteristics, the ethical context and behaviour variables and job retention and performance related-factor will influence individuals' retention and performance in an organisational context.

The association between the two constructs, namely ethical context and behaviour variables and the job retention and performance related-factors, can be moderated by the biographical characteristics.

Knowing individuals' perceptions of ethical context and behaviour variables and the job retention and performance related-factors will enhance understanding of the organisational resources that may potentially inform employee retention and performance practices.

#### *1.6.2.6. Methodological assumptions*

Methodological assumptions are beliefs concerning the nature of social science and scientific research. According to Hammersley (2012), such beliefs are more than methodological preferences, assumptions and presuppositions about what ought to constitute good research. There is a direct association between methodological beliefs and the epistemological status of research findings (Mouton, 1996). In the following section, the methodological dimensions are discussed according to their relevance to the proposed study.

##### *a) Sociological dimension*

The sociological dimension conforms to the requirements of sociological research ethics, which draws on the research community for sources of theory development. In terms of the philosophy of the sociological dimension, research is experimental or non-experimental, analytic or exact, since the issues that are being studied are subject to quantitative research and analysis (Hammersley, 2012). This study will be non-experimental in nature and will focus on the quantitative analysis of variables and concepts that will be described in chapters 6 and 7, which deal with empirical and research results.

##### *b) Epistemological dimension*

According to Lees (2012), the epistemological dimension is concerned with the theory of knowledge, which seeks to inform researchers about how they can know the world. The epistemological dimension is the form of proof one requires to clarify and justify a claim to knowledge about the social world. This study is epistemological in nature because it focuses primarily on testing the central hypothesis in order to discover the truth.

##### *c) Ontological dimension*

The ontological dimension refers to claims and assumptions about the nature of social reality. According to Hammersley (2012), researchers who use the ontological dimension are

objective, subjective and pragmatic. Objectivists such as Pendlebury (2011) posit that reality can be tested and verified. Researchers who embrace this point of view will attempt to determine causes and effects, as well as explanations of phenomena. This study is objective in that it emphasises building knowledge by testing specific research hypotheses, in order to assist in retention and performance practices. Pragmatists are generally not committed to any one system of philosophy or reality. In this position, researchers need to select procedures that best fit their needs, in order to solve the problem at hand. This study is pragmatic because it systematically seeks to measure the properties of ethical context and behaviour variables and the job retention and performance related-factors.

*d) Teleological dimension*

According to Hammersley (2012), in the teleological dimension, the research should be systematic in nature and goal-directed. It is crucial to state the problem being investigated, together with the research questions and aims, which makes this study teleological in nature. The research goals of this study are explicit, namely to measure the relationship between ethical context and behaviour variables, and the job retention and performance related-factors. Furthermore, the teleological dimension seeks to develop the field of industrial and organisational psychology by providing it with new knowledge that could inform employee retention and performance practices within organisations.

*e) The methodological dimension*

According to Hammersley (2012), methodological assumptions are beliefs concerning the nature of social science and scientific research. Social science advocates have classified research methodologies as being either quantitative or qualitative (Cohen, Manion & Morrison, 2011). Quantitative research is used by researchers seeking to classify features, count them, and construct statistical models in an attempt to explain what has been observed. Qualitative research, however, is deemed to be much more fluid and flexible than quantitative research, in that it focuses on describing unanticipated findings (Cohen et al, 2011). In this study, quantitative (exploratory, descriptive and exploratory) research will be presented in the form of a literature review and empirical study focusing on ethical context and behaviour variables, and job retention and performance related-factors.

## **1.7. RESEARCH DESIGN**

The concept of a research design refers to how the research was conducted by the researcher. According to Cohen et al (2011), a research design is the arrangement of conditions for the collection and analysis of data, in a manner that aims to combine relevance to research aims with economy in procedure. The research design used in this study will be discussed with reference to the types of research conducted, followed by a discussion of validity and reliability.

### **1.7.1. Exploratory research**

According to Mouton (1996), exploratory research focuses on gathering information from a relatively unknown field. The main aims are to gain insights, establish central concepts and constructs, and then to establish priorities. This research is exploratory, in that it seeks to compare different theoretical perspectives on ethical context and behaviour variables, and job retention and performance related-factors.

### **1.7.2. Descriptive research**

According to Mouton and Marais (1996), descriptive research refers to the in-depth description of the individual, situation, group, organisation, culture, sub-culture, interaction or social object. Its purpose is to systematically clarify the relationships between variables in the research domain. The main objective is to describe issues as accurately as possible. In the literature review, descriptive research is applicable with reference to the conceptualisation of ethical context and behaviour, and job retention and performance factors. In the empirical study, descriptive research is applicable to the frequencies, means, standard deviations and Cronbach's alphas (internal consistency reliabilities) of the constructs of ethical context and behaviour and the constructs of job retention and performance related-factors.

### **1.7.3. Explanatory research**

Explanatory research focuses on defining the research question and formulating hypotheses about new and relatively unexplored research areas (Mouton, 2001). According to Mouton (1996), explanatory research goes further than merely indicating that a relationship exists between the variables. The same authors affirm that it indicates the direction of the

relationship in a causal relationship model. This study is partly explanatory because it aims to gain a deeper understanding of the relationships between the ethical context and behaviour variables, and the job retention and performance related-factors, as manifested in a group of adult subjects.

The final goal of this study is to draw conclusions regarding the relationship between the ethical context and behaviour variables and the job retention and performance related-factors. Thus, this study meets the requirements of the types of research discussed above.

#### **1.7.4. Validity**

According to Rosenow and Rosenthal (2009), the purpose of research is to describe the population in terms of the sample's characteristics. Thus, the manner in which the research is designed and the literature reviewed should make the research valid in respect of the variables being investigated. In this study, research validity will be ensured by using literature that is relevant to the study, as well as appropriate instruments. This will aid the researcher to make informed conclusions regarding the research questions that the study seeks to answer.

##### *1.7.4.1. Validity with regard to the literature review*

The validity of the literature review will be ensured by using only literature that is relevant to the research topic, problem statement and aims of the study. In addition, this study will attempt to make use of recent literature from empirical sources, in order to ensure that the literature is valid. However, other classical and contemporary mainstream research may be referred to when it is relevant to the conceptualisation of the variables under investigation in this study.

##### *1.7.4.2. Validity with regard to the empirical study*

In empirical research, validity is ensured through the use of appropriate and standardised measuring instruments. Those used in this study were critically examined for their criterion-related validity, in order to ensure the accurate prediction of scores on the relevant criterion, as well as content validity and construct validity (the extent to which the measuring instruments measure the theoretical constructs they purport to measure).

### **1.7.5. Reliability**

Reliability is the degree to which measures yield consistent results and are free from error (Wilson, 2014). Two important aspects that are related to reliability are repeatability and internal consistency. This study makes use of existing literature sources, theories and models, in order to ensure the reliability of the literature review. The reliability of the empirical study will be ensured through the use of sampling methods.

#### *1.7.5.1. Reliability with regard to the literature review*

Reliability refers to the notion that different research participants being tested by the same instrument at different times should respond identically to the instrument (Wilson, 2014; Mitonga-Monga, 2010). Reliability with regard to the literature review was addressed by using existing literature sources, theories and models that are available to other interested academics (Wilson, 2014).

#### *1.7.5.2. Reliability with regard to the empirical study*

In the empirical study, it was not possible to test the participants twice in order to confirm test-retest reliability. However, the data gathered was used to confirm consistency. Inter-item correlation was performed in order to determine the reliability of the items contained in the questionnaire. In this way, the overall reliability of the research was improved (Wilson, 2014).

### **1.7.6. Unit of analysis**

A unit of analysis refers to factors such as characteristics, phenomena and behaviour which could interest the researcher and allow him/her to describe, explain and summarise them (Babbie, 2013). In this study, the unit of analysis is the individual (Mouton, 1996). The “individual” refers to employees permanently employed in a railway organisation in the DRC. The interpretive unit of analysis is the group (sample) of employees.

This study focuses on the constructs of ethical context and behaviour and the job retention and performance related-factors. On an individual level, the individual scores of each of the measuring instruments will be taken into consideration, and at group level, the overall scores on all measuring instruments will be considered. On a sub-group level, age, gender, educational level and tenure scores will be considered in determining whether there is an

association between the ethical context and behaviour and the job retention and performance factors, in order to develop model to inform employee retention and performance practices in a railway organisation in the DRC.

### **1.7.7. Variables**

This study attempted to measure the direction and magnitude of the relationship between three independent variables (ethical culture, ethical climate and ethical leadership) and four dependent variables (work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour). The research will also measure the overall relationship between the ethical context and behaviour (as independent variables) and the job retention and performance related-factors (as a dependent variable). According to Cohen et al. (2011), the distinction between the independent and dependent variables resides in the basic cause and effect relationship between specific phenomena. However, due to the cross-sectional nature of this research, the focus will not fall on establishing a cause and effect relationship, but rather on establishing relationships between variables.

In this study, in order to determine the relationship between the independent variable ethical context and behaviour, and the dependent variable job retention and performance related-factors, criterion data on the latent variables and the dependent variables will be collected by means of standardised measuring instruments selected for the purpose of this research.

The biographical information (age, gender, educational level and tenure) will be considered as centred variables moderating the relationship between the ethical context and behaviour (independent variable) and the job retention and performance related-factors (dependent variable).

Figure 1.1 below provides an overview of the core research variables and relationships investigated in this study.

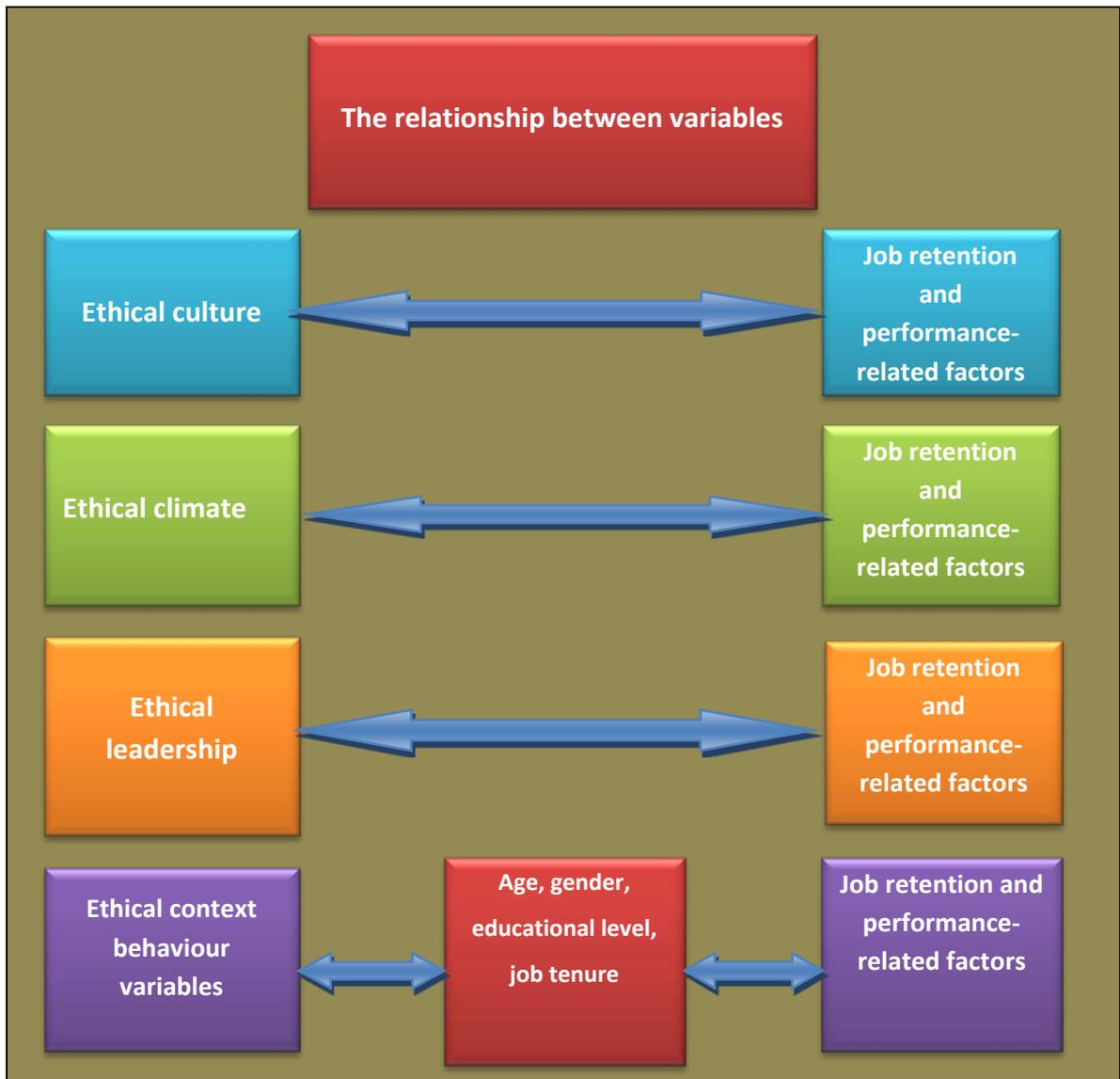


Figure 1.1 Overview of core research variables and relationships investigated in this study

### 1.7.8. Delimitations

This study was confined to research dealing with the relationship between the core constructs, namely ethical context and behaviour, and the job retention and performance. In an attempt to identify factors that could influence an individual's ethical context and behaviour and job retention and performance related-factors, the variables used as control variables were limited to age, gender, educational level and job tenure. This study therefore only focused on the effects of the ethical context and behaviour variables on the job retention and performance related-factors.

No attempt was made to manipulate any of the information, results or data on the basis of family or spiritual background. Also not included in any classification process were factors of disability or illness, either physical or psychological. This study was intended to be foundational research, which restricted its focus to the association or relationship between variables. If there is an association, then this information could be useful to future researchers, in order to address other issues relating to the constructs. The main purpose of this research was not to establish the cause and effect of the relationship, but merely to determine whether or not the relationship does exist, as well as whether or not the relationship between the ethical context and behaviour variables and the job retention and performance related-factors is influenced by biographical characteristics.

#### **1.7.9. Ethical considerations**

According to Cohen et al. (2011), ethical considerations are an important part of a research design. Babbie (2013) defines research ethics as the minimum standards of moral principles that guide the behaviour of researchers. These principles include compliance with social sciences and professional obligations when dealing with research participants and participating organisations. As part of the efforts to uphold ethical requirements, the following ethical considerations will be adhered to:

- Obtaining appropriate approval from the target organisations
- Receiving the informed consent of research participants
- Maintaining the utmost confidentiality as regards results
- Ensuring, as far as possible, the anonymity of participants
- Utilising classical and recent sources applicable to the study
- Conducting research within recognised parameters
- Acknowledging all sources from where information and literature were obtained
- Consulting experts in data analysis and the field of research, in order to ensure a scientific research process
- Informing participants about the results of the research
- Compiling and reporting information pertaining to the results of the research according to prescribed guidelines.

## **1.8. RESEARCH METHODOLOGY**

The research methodology of this study will be divided into three phases: the literature review, empirical study, and conclusions, limitations and recommendations, as well as areas for future research.

### **PHASE 1: LITERATURE REVIEW**

#### **Step 1: Ethical context and behaviour described**

A critical evaluation of research in the ethical context and behaviours constructs of ethical culture, ethical climate and ethical leadership will be described. Based on this conceptualisation of the ethical context and behaviour constructs, conceptual models will be used to illustrate the principles and concepts discussed in the literature. Finally, the variable influencing ethical context and behaviour variable will be discussed

#### **Step 2: Job retention and performance related-factors**

A critical evaluation will be carried out of research relating to the constructs of job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour) will be described. Based on these, conceptualisations of the abovementioned constructs, models will be used to illustrate the principles and concepts discussed in the literature. Finally, the variables influencing employee's job retention and performance related-factors will be discussed.

*Work engagement (UWES), Job Satisfaction (JSQ), Organisational Commitment (OCS) and Organisational Citizenship Behaviour (OCBQ)*

A critical evaluation of research in the field of organisational psychology relating to the constructs of work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour will be provided. Based on the conceptualisation of the abovementioned constructs, the following conceptual models will be used: the Utrecht Work Engagement Scale (Schaufeli, Bakker & Salanova, 2006); the Burnout-Work Engagement (Maslach, Jackson & Leiter, 1997); the Job Satisfaction Questionnaire (Lock, 1976; Vitell & Davis, 1990); the Organisational Commitment Scale (Meyer & Allen, 1997) and the Organisational Citizenship Behaviour Questionnaire (Organ, 1988). These models will be

used to illustrate the principles and concepts discussed in the literature. Finally, the implications for industrial and organisational psychology and business ethics practices pertaining to retention and performance of staff will be discussed.

### **Step 3: The integration of the constructs of the ethical context and behaviour variables and the job retention and performance related-factors**

This step relates to construction of a theoretical model in the relationship between ethical context and behaviour variables and the job retention and performance related-factors. The model will be based on the hypothetical relationship between these constructs. The possible effects of biographical variables such as age, gender, educational level and job tenure will also be discussed. Finally, this step will culminate in conceptualising a model to understand the effects of the ethical context and behaviour on the job retention and performance related-factors, as manifested in the literature. The implications for industrial and organisational psychology and business ethics practices pertaining to retention and performance of staff will be also discussed.

## **PHASE 2: THE EMPIRICAL STUDY**

The proposed study will make use of a quantitative research design (Cohen et al., 2011). It will consist of the following nine steps:

### **Step 1: Determination and description of the sample**

The procedure for determining the sample and sample characteristics will be outlined and discussed in this step.

### **Step 2: Choosing and motivating the psychometric battery**

This step will describe the measuring instruments used to conduct this research.

### **Step 3: Administration of the psychometric battery**

In this step the process used to collect data will be considered.

### **Step 4: Scoring of the psychometric battery**

This step will discuss how the data will be captured and analysed.

### **Step 5: Formulation of research hypotheses**

The research hypotheses will be formulated in order to achieve the objective of the study.

### **Step 6: Statistical processing of data**

This step will describe the statistical procedures relevant to this research.

### **Step 7: Reporting and interpreting the results**

This step will indicate how the results will be presented.

### **Step 8: Integration of the research findings**

Findings related to the literature review will be integrated with the findings from the empirical study, in order to arrive at the overall findings of the research.

### **Step 9: Formulation of conclusions, limitations and recommendations**

The final step involves the drawing of conclusions based on the results and their integration with the theory. The limitations of the study will also be discussed and recommendations will be made for future research in terms of ethical context and behaviour variables (conceptualised as indicated) and the job retention and performance-related factors (conceptualised as mentioned), especially with regard to retention and performance of staff in the organisational context.

## **1.9. CHAPTER DIVISION**

This study is divided into eight chapters as follows:

### **Chapter 2: Ethical context and behaviour**

The aim of this chapter is to theoretically explore ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) and how these constructs are conceptualised and explained by theoretical models in the literature. Finally, the variables influencing ethical context and behaviour are discussed.

### **Chapter 3: Job retention and performance related-factors**

This chapter's aim is to theoretically explore job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and Organisational citizenship behaviour) and how these constructs are conceptualised and

explained by theoretical models in the literature. Finally, the variables influencing the job retention and performance factors are considered.

#### **Chapter 4: Theoretical relationship between ethical context and behaviour variables, job retention and performance related-factors and biographical characteristics**

The aim of this chapter is to theoretically explore the relationship between ethical context and behaviour variables, job retention and performance related-factors and biographical characteristics by the methods used in previous research.

#### **Chapter 5: The construction of a theoretical model for the relationship between ethical context and behaviour variables, job retention and performance related-factors and biographical characteristics**

This chapter aims to construct a theoretical model for the relationship between ethical context and behaviour variables, job retention and performance related-factors and biographical characteristics.

#### **Chapter 6: Research design**

The aim of this chapter is to describe the research design. Firstly, the aims of the research design are presented, and an overview of the study's population and sample provided. The measuring instruments are discussed and the choice of each justified, followed by a description of the data gathering and analysis procedures. Finally, the research hypotheses will be formulated.

#### **Chapter 7: Research results**

This chapter aims to report on the statistical results, tests and various research hypotheses, and to integrate the empirical research findings with the literature review. The statistical results will be reported and interpreted in terms of descriptive, common and inferential (multivariate) statistics.

#### **Chapter 8: Conclusions, limitations and recommendations**

The intention of this chapter is to ensure that results are integrated and conclusions reached. The limitations of the study are explained and recommendations are made for the field of

industrial and organisational psychology, both practically and in terms of further research. Finally, the chapter will make concluding remarks, in order to integrate the research and evaluate the value added by the research project.

#### **1.10. CHAPTER SUMMARY**

In this chapter, the background to and motivation for the research, problem statement, objectives of the study, paradigm perspectives, and research design and research methodology of the study were discussed. The motivation for this study is based on the fact that an exploration of the relationship that exists between ethical context and behaviour variables and job retention and performance related-factors, elements that constitute the overall relationship between these constructs, may assist companies and industrial psychologists in fostering ethical context and behaviour practices for the retention and performance of staff.

## **CHAPTER 2 ETHICAL CONTEXT AND BEHAVIOUR**

This chapter addresses part of the first aim in the literature review, namely to theoretically explore ethical context and behaviour, which is conceptualised as consisting of ethical culture, ethical climate and ethical leadership, and the relevant variables influencing these constructs.

### **2.1. ETHICAL CONTEXT AND BEHAVIOUR DESCRIBED**

Organisational ethical context and behaviour includes the values and moral ideologies adopted by organisational members, institutionalised philosophies regarding principled conduct, and ethical codes, regulations and practices that shape corporate actions (Valentine, Godkin & Lucero, 2002). Ethical context and behaviour has been described as factors influencing ethical conduct in an organisation (Treviño, Butterfield & McCabe, 1998). Valentine, Godkin, Fleischman and Kidwell (2011) assert that ethical context and behaviour is comprised of the institutionalised guidelines, values, procedures and practices that establish a collective understanding of business ethics in a working environment. Such an environment can be described as having a widely established effect on decision making (Treviño et al., 1998). Most ethical decision making models propose that ethical conduct is influenced by a combination of individual values and characteristics such as respect, fairness, honesty, integrity, reward systems, rules and codes. Ethical context and behaviour refers to the organisation's ability to treat its members fairly by modelling the correct behaviour and teaching them to do the right thing. This implies influencing them to do what is expected, including the implementation of a formal ethical programme, which contains the element of reward and punishment (Fatima, 2011).

According to Kaptein (2011), ethical context and behaviour helps to create a positive perception of the work climate and to reinforce an ethical culture (Treviño et al., 1998), thereby creating an environment that reflects the ethical messages and values modelled by top leaders, which are reinforced through other systems. Thus, culture has a powerful role to play in shaping employee behaviour (Schein, 2004) on a daily basis, including the behaviour of managers.

In the business ethics literature, ethical context and behaviour is represented by three multidimensional constructs, namely ethical culture (Kaptein, 2008), ethical climate (Treviño, 1990) and ethical leadership (Brown et al., 2005; Kalshoven et al., 2011). These constructs

were developed more or less independently, and are based on different assumptions. Although these three constructs have been theoretically associated with individual ethical conduct, empirical support for this relationship is lacking. Brown et al. (2005) and Treviño, Den Nieuwenboer and Kish-Gephart (2014) raise the following questions concerning ethical culture, ethical climate and ethical leadership, which are still unresolved: Are measures of ethical culture, ethical climate and ethical leadership touching on the same or different aspects of ethical context and behaviour? Do ethical culture, ethical climate and ethical leadership predict the same or different outcomes, such as attitudes and behaviours?

According to Treviño (1990), these questions are linked to discussions in the broader organisational studies literature about the relationship between these context and behaviour variables and attitudes and behaviour. Valentine et al. (2011) propose a somewhat controversial theory, namely that the purported differences between ethical culture, ethical climate and ethical leadership literature relate to their theoretical roots, perspective and preferred methodology, rather than the differences of substance. Denison (1996) posits that the tendency to focus on the differences between these three constructs in the literature may serve the self-interests of researchers in each camp. However, a more integrated approach may be needed in order to understand the phenomenon in its organisational context. To gain a better understanding of the ethical organisational context and behaviour, ethical culture, ethical climate and ethical leadership will be discussed below.

## **2.2. ETHICAL CULTURE**

In the following section the conceptualisation of ethical culture, developing and changing the ethical culture as well as Kaptein's Corporate Ethical Virtues will be discussed.

### **2.2.1 Conceptualisation of ethical culture**

The ethical culture construct is developed from a wide spectrum of disciplines, such as organisational theory, organisational behaviour, moral philosophy and anthropology (Treviño et al., 1986). According to Treviño (1990), the theory of organisational ethical culture is complex. Kopelman, Brief and Guzzo (1990) divided the study of culture into two categories, namely the phenomenal, focusing on observable behaviours and artefacts, and the ideational, focusing on underlying shared meaning, symbols and values. Ethical culture (Svanberg & Öhman, 2013) emphasises the phenomenal level of culture, which is more conscious and overt as well as comprising observable manifestations of culture such as

structure, systems and organisational practices, rather than the deeper structure of values and assumptions. According to Treviño and Nelson (2004), cultures are complex combinations of formal and informal organisational systems. To create a durable and sustainable organisational culture, these systems need to be aligned in order to support ethical behaviour (Chye Koh & Boo, 2004).

Schein (2004) defines the culture construct as a historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions by which individuals communicate, perpetuate and develop their knowledge and attitudes. According to Key (1999), ethical culture manifests itself as a part of the overall organisational culture. The same author perceives organisational culture to be grounded in an anthropological worldview, and as a result, focuses on formal (leadership, organisational structure, policies and codes, reward system, orientation and training programmes, and decision-making process) and informal systems (informal norms, heroes and role models, rituals, myths and stories, and language) influencing an individual's behaviour.

Ali and Patnaik (2014) indicate that although the concept of organisational culture has been studied from many perspectives and disciplines, such as anthropology, sociology, organisational behaviour and organisational leadership, no single definition exists yet. Painter-Morland (2008) likewise suggests that there is no commonly accepted definition of organisational culture. However, Schein (2004, p.1) attempts one, defining organisational culture as "a dynamic phenomenon that surrounds us at all times, being constantly enacted and created by our interactions with others and shapes by leadership behaviour, and a set of structure, routines, rules, and norms that guide and constrain behaviour". From this definition, organisational culture can be viewed as a characteristic of an organisation and is therefore something that can be assessed, described and managed. This understanding of culture may contribute to the idea that an ethical culture is a useful tool for managing ethical risks (Painter-Morland, 2008).

Treviño (1990) conceptualised ethical culture as a situational moderator of the relationship between an individual's cognitive and moral development stage and ethical or unethical conduct. In terms of this model, culture comprises an organisation's normative structure, taking into account the norms regarding what is and is not the right way of behaving, referring to others' behaviour, expectations about obedience to leaders, and the extent to which an organisation encourages individuals to take responsibility for the consequences of their actions (Treviño, Butterfield & McCabe, 1998). In addition, Treviño and Nelson (2010)

perceive ethical culture to exert a direct influence on an individual's behaviours. Furthermore, this construct has been perceived as a specific dimension of organisational culture that describes not only organisational ethics, but also predicts organisational ethical behaviour (Kaptein, 2011b).

Treviño, Weaver and Reynold (2006) define the ethical culture construct as a constellation of organisational culture that influences employees' ethical behaviour through formal and informal organisational structures and systems. The ethical culture construct is also defined as a subset of organisational culture, representing a multidimensional interplay among various formal and informal systems of behavioural control that are capable of promoting either ethical or unethical behaviour in the organisation (Painter-Morland, 2008).

Ethical culture encompasses the experiences, presumptions and expectations regarding how the organisation is preventing unethical behaviour and promoting ethicality. It also represents a subset of organisational culture, which can be enforced through formal systems (e.g., leadership, structure, selection system, orientation and training, codes of ethics, rewards systems, decision-making) and informal systems (e.g., peer behaviour, ethical norms, rituals, myths/stories, and language) aspects (Treviño et al., 2006).

### **2.2.2. Developing and changing ethical culture**

Developing and changing an organisation's ethical culture is a demanding task (Luthans, 2010). According to Treviño and Nelson (2010), developing or changing organisational ethics involves simultaneously developing or changing multiple aspects of the organisation's culture. To be successful in this regard, leaders at all levels need to take the alignment of all relevant formal and informal organisational systems into account. In most cases, this also requires a major commitment from the top management levels in the organisation. Treviño and Nelson (2004) point out that culture change is possible only if it is supported and modelled by top management. However, Luthans (2010) suggest that the best way of changing a culture is to first change behaviour. This behaviour change will then lead to the desired change in attitudes and values.

According to Treviño et al. (2010), developing an ethical culture is easier than changing an existing one. In new, networking types of organisations, employees are quite open to learning and accepting the culture of their new organisations. However, anthropologists and organisational scientists agree that changing an established culture is not an easy process.

This point of view is consistent with the idea expressed by Treviño and Nelson (2011) that changing individual and group behaviour is both difficult and time-consuming.

Hofstede (1981) indicates that the most common way of changing mental programmes of individuals is to first change their behaviour. He goes on to comment that the belief that value change has to precede behaviour change is a naive (idealistic) assumption, which ignores the contribution of the situation to actual behaviour. Support can be found in the literature for both the view that culture can be changed and the view that it cannot be changed. The position adopted in this study is that culture can be changed. Some methods for attempting culture change call upon learning processes and persuasion or, in some cases, coercion, to help bring about changes in attitudes (Argote, 2011). In this case, organisations that rely on culture change should pay attention to changing recruitment, selection, promotion, reward and redundancy policies to alter the composition of the workforce, thereby retaining those who have the desired beliefs, values and attitudes associated with the desired culture (Robbins, Judge, Odendaal & Roodt, 2010).

In addition, efforts made towards changing organisational ethics (Treviño et al, 2011) must target multiple formal and informal organisational subsystems. According to Asif (2011), these subsystems must work together in order to create clear, consistent messages about what is and what is not appropriate behaviour in the organisation. If the subsystems are not aligned, confusion and mixed messages will result. Thus, the entire process of formal and informal subsystems must be analysed and targeted for development and change.

Michalos, Makris, Papakostas, Mourtzis and Chryssolouris (2010) indicate that alignment between the formal and informal subsystems does not necessarily produce an ethical culture. Rather, such a culture is established when formal policies and procedures involving ethical criteria are supported by ethical values and norms within informal systems.

The interaction between formal and informal systems produces conditions of alignment or non-alignment. Ethical decisions/behaviours occur mostly when an organisation's informal system supports the ethical criteria identified in the formal policies and procedures (i.e. alignment). Non-alignment between the two systems is more likely to develop when the formal system includes ethical considerations, but when the top management of an organisation fails to recognise the role of the informal system or subtly encourages behaviours that conflict with the formal guidelines (Michalos *et al*, 2010). The next section briefly explores the different models of ethical culture.

### **2.2.3. Treviño's model of ethical culture**

According to Treviño et al. (2004), organisational cultures are complex combinations of formal and informal organisational systems. To create a durable and sustainable ethical culture, these systems need to be aligned in order to support ethical behaviour (Chye-Koh et al., 2004).

#### *2.2.3.1 Formal cultural system*

Ethical culture in organisations is created and maintained through a complex interplay of formal and informal organisational culture systems. Formally, executive leadership, organisational structure, selection systems, orientation and training programmes, rules and policies, reward systems, and the decision-making process all contribute to culture creation and maintenance. Informally, the culture's norms, heroes, rituals, stories and language keep the culture alive and indicate to both insiders and outsiders whether the formal systems represent fact or façade (Treviño et al., 2011).

##### *a) Executive leadership*

According to Treviño et al. (2011), leadership is a critical dimension of the organisation's culture because executive leaders can create, maintain or change culture. Senior leaders need to have and demonstrate a high level of purpose by shaping visions and missions towards common goals. A leader is thought to play a particularly important culture-creating role, personify the said culture's values, be a role model for others to observe and follow, and to guide the process of decision making at all levels of the organisation. Treviño et al. (2011) indicate that a leader can influence and help to maintain the culture in the organisation, and can also change it by articulating a vision; paying attention to, measuring and controlling certain things; making critical policy decisions; recruiting talented personnel who fit the organisational vision; and holding people accountable for their actions.

Leadership is considered being a driver for organisational culture. It is hypothesised that there is a positive relationship between executive leaders' behaviour and organisational culture. Robbins et al. (2010) point out that it is often the case that strong leaders develop a strong organisational culture through their actions, while weaker ones are likely to create strong organisational activities. This issue will be discussed in more detail in chapter 5 of this study.

### *b) Selection systems*

Talented employees in today's turbulent world of work prefer to work for reputable companies. Companies are also emphasising the selection system, which is a key element of the selection of competent workers. Treviño et al. (2010) highlight the ideas that selection systems are essential to hiring people who fit the culture of the organisation. The same authors indicate that by taking the ethical culture into consideration, organisations can avoid ethical problems by recruiting the right people, thereby building a reputation that precedes the organisation's representatives wherever they go. According to Robbins et al. (2010), the goal of the selection process is to identify and appoint ethical and knowledgeable people who are highly skilled and able successfully to do their job within the organisation. In addition, the selection process helps applicants and provides them with information about the organisation. The candidates learn about the organisation and if they perceive there to be a conflict between their values and those of the organisation, they can decide whether or not to apply for the position. In this case, selection becomes a two-way street, allowing both the employer and applicant to part ways if there appears to be a mismatch. In this way, the selection system sustains an organisation's ethical culture, by not selecting people who might attack or undermine its core values (Robbins et al., 2010). Schein (2004) confirms that leaders need to establish this culture in their organisation by hiring, retaining and advancing applicants who are perceived to have the required values, and eliminating those who they consider to have undesirable values.

### *c) Organisational structure*

According to Treviño et al. (2011), bureaucracy brought with it the idea of legitimate authority. These authority figures in the organisational structure serve important bureaucratic roles. They drive the process of work, delegate responsibility to their followers, conduct performance appraisals, and make decisions about promotions and raises. The legitimate authority in the organisational structure can become a threat to the ethical culture. Followers, in most cases, tend to obey authority figures regardless of what they are instructed to do. This natural tendency towards irrefutable flexibility can be a real threat to the organisation's attempt to build followers' responsibility into its ethical culture (Treviño et al., 2004). Mullins (2010) states that the attempt to control follower behaviour has resulted in many organisations expecting loyalty from their employees, and others demanding blind and irrevocable obedience to authority figures.

Irrevocable and blind obedience to authority figures (Treviño et al., 2011) means that employees are not expected to think for themselves, challenge bad instructions or take personal responsibility for the problems they encounter or observe. Therefore, a culture that expects unquestioning and blind flexibility from employees may result in serious and deeper ethical problems. Recent studies reveal that the more the organisation demands unquestionable or blind obedience to authority figures, the higher the rates of unethical conduct among employees, the lower their tendency to seek advice about ethical issues, and the lower the likelihood will be that followers will report ethical violations or deliver bad news to the top management (Ferrell, Fraedrick & Ferrell, 2013).

According to Carroll et al. (2011), in order to avoid ethical violations, ethical culture within the organisation needs to incorporate a structure that facilitates and supports individual responsibility and accountability at all levels. Each organisational member in this case is encouraged to take responsibility for his or her actions and to question authority figures when they envisage potential problems. This could be challenging when employees are operating in an environment such as the Democratic Republic of Congo, in which power distance is observed. Ardichivili, Jondle, Kowske, Comachione and Thakadipuram (2012) assert that an ethical culture needs to be associated with a structure that provides for equality, distributed authority and shared accountability.

*d) Value and mission statements, policies and codes*

Many organisations are striving to guide employees' behaviour through formal organisational value statements, mission statements and credos, policies and formal codes of ethical conduct. Kreitner and Kinicki (2010) view value statements as the principles, standards and actions that an individual in an organisation represents, which they consider to be inherently worthwhile and of the utmost importance. Value statements include how individuals threaten each other, as well as how individuals, teams, groups and organisations conduct their business, and what is most important to these organisations. Carroll et al. (2011) support the view that values are ideas that a person or a group believes to be right or wrong, good or bad, and attractive or undesirable. In this sense, ethical values become an element that can influence ethical reasoning by enhancing individuals' perceptions of the ethical context, as well as by demonstrating, through action, in what ways the company is ethical, based on the objective reality of the work situation (Valentine et al., 2011).

A mission statement is perceived as the core purpose for which an individual, team, group or organisation is created. It is summarised in a clear, short, inspiring statement that focuses attention on one specific direction by clearly stating the nature of the individual, business or group's uniqueness (Kreitner & Kinicki, 2010). A credo is viewed as a statement of beliefs, core principles or values that are crucial to an organisation and its human capital (Williams & Glisson, 2014). Treviño et al. (2011) also indicate that values, mission and credo statements often address multiple audiences or stakeholders, including the organisation's management, employees, customers or clients, shareholders, and other residents of the communities and countries in which it conducts business.

#### e) *Reward systems*

According to Martin and Fellenz (2010), the purpose of any reward system is to attract, retain and motivate employees. A reward system is a key component of the ethical culture, and plays an essential role in aligning or misaligning the cultural systems within the organisation (Treviño et al., 2011). Rewarding and punishing behaviours is often linked to the way in which individuals operate and behave within the organisation. Individuals who observe and who are either committed or not committed to ethical conduct in the organisation are likely to be rewarded or punished. Treviño et al. (2004) are of the opinion that in order to understand the ethical behaviour of an individual in the workplace, attention should be paid to behaviours that are rewarded or punished, as well as how the reward system is aligned to the rest of the ethical culture.

Kerr and Slocum (2005) contend that a reward system is a final mechanism for promoting, altering, communicating and reinforcing the values and norms that comprise the organisation's ethical culture. A reward system in this case could be monetary or extrinsic, such as pay and bonuses for quotas achieved, or non-monetary, such as promotion, recognition, praise and approval (Robbins, Judge, Odendaal & Roodt, 2010). Chenhall and Langfreind-Smith (2003) suggest that the non-monetary reward system is an important aspect when attempting to change or manage an organisation's culture, since employees will be more likely to alter their own behaviours and norms if they believe that they will be rewarded.

Treviño et al. (2011) raise the issue of reward systems and whistle-blowers. In today's corporate world, fewer employees are directly supervised. Therefore, corporations must rely more on their workers to report unethical behaviour. Miceli, Near and Dworkin (2009) are of

the opinion that workers often refrain from reporting wrongdoing, despite their awareness of it, since they believe that their organisation does not welcome reports of this nature. Many organisations (Kaptein, 2010) do not welcome such reports because this challenges the organisational hierarchy. As a consequence, workers who report wrongdoing run the risk of one or more types of retaliation: nullification, isolation, defamation or expulsion (Gao, Greenberg & Wong-on-Wing, 2014; Kaptein, 2010). Treviño et al. (2010) share this view, and note that employees who report unethical behaviour are punished rather than rewarded for doing what they think is right. An ethical organisation, however, should view the whistleblower as a pivotal cog in its control system and find a way to ensure that whistle-blowing is a safe activity that can be encouraged and rewarded. Thus, reward systems are important because they can provide guidance about expected behaviour, but they are even more important because individuals look to them for the truth regarding what is valued in the organisation (Treviño et al., 2004).

*f) Orientation and training programmes*

According to Martins, cited in Robbins et al. (2009), socialisation is often started through formal orientation programmes and reinforced through on-going training of newly recruited employees. Most importantly, because new employees are unfamiliar with the organisation's ethical culture, they are also likely to disturb the beliefs and customs that are already in place. Treviño et al. (2004) indicate that an organisation's values and guiding principles are communicated during orientation programmes. Guidance in terms of ethical decision-making is then provided in subsequent training programmes. Mullins (2010) points out that such decision-making is often influenced by the organisation's formal decision-making processes. Treviño et al. (2004) go on to state that managers will ignore the ethical dimension of decisions unless leaders state that ethical concerns must be a formal part of organisational decisions.

*g) Decision-making process*

As previously mentioned, Treviño et al. (2010) contend that ethical decisions are often influenced by the organisation's decision-making processes. The emphasis on ethical decisions can also be reinforced by regularly addressing ethical concerns during meetings, as well as by making them an expected part of leaders' decisions regarding new products or new business ventures. Sustainability or the impact of environmental changes is now an expected and routine part of corporate decision making in many organisations. Treviño et al.

(2011) add that some organisations are striving to create special, higher-level ethics committees charged with the unique mission of reviewing major organisational-level decisions from an ethical perspective. The same authors indicate that many organisations have advocated the implementation of moral quality circles to assess the majority of business decisions (Treviño et al., 2010).

#### 2.2.3.2. *Informal cultural system*

Robbins et al. (2010) indicate that in addition to the abovementioned formal systems, organisational culture is kept alive informally and symbolically through informal norms, heroes, rituals, myths and stories. The information concerning these symbols (Luthans, Youssef-Morgan & Avolio, 2015) is transmitted through informal communication systems such as the grapevine. In this way, individuals in a work environment are informed about what behaviours are rewarded, how decisions are really made, and what organisational leaders really care about and expect. If the messages from the formal and informal cultural systems are not the same, the organisation's culture and its subset of ethical culture will not be considered to be aligned. Mullins (2010) posits that employees in an organisation are more likely to believe the messages transmitted by informal systems than those transmitted by formal ones. Previous studies by Blome and Paulraj (2013) found that employees' perceptions of informal cultural systems influence their ethical behaviour more than formal systems do. Therefore, managing informal systems becomes extremely important.

##### a) *Norms*

According to Treviño et al. (2011), norms are standards of behaviour that are accepted as being appropriate by members of a group. Norms exert a strong influence on individual behaviour in organisations, and they can serve to support ethical or unethical conduct (Treviño et al., 2004). Amernic and Craig (2012) contend that norms generally exert more influence over individual behaviour than formal rules and policies do, which helps to explain why some codes of ethics are ineffectual. Workers will generally do what is expected and accepted, even if it is officially forbidden. To avoid this, Amernic et al. (2013) suggest that organisational norms should be aligned with ethical codes and policies, informal standards, rules, mission and values.

#### *b) Heroes and role models*

Treviño et al. (2010) define heroes as the symbolic figures who set standards of performance by modelling certain behaviours. These heroes might be organisational leaders who are in a formal position or have retired from the organisation, and their knowledge of the organisational values could continue to influence decision-making.

#### *c) Rituals*

According to Robbins et al. (2009), rituals are repetitive sequences or a detailed set of techniques or activities that express and reinforce the key values of the organisation, its most important goals, and the people who are indispensable. Ritual tells individuals, in a symbolic manner, what the organisation wants them to do and how it expects them to do it (Treviño et al., 2011). Rituals are ways of affirming and communicating culture in a very tangible or palpable way. Martin, Thomas, Topakas, West and Yeats (2012) came to the conclusion that rituals of organisational life include training, programmes, and promotion and appraisal-related procedures, which reinforce the way in which individuals do things in the organisation and act as a signal that indicates what is important and valued.

#### *d) Myths and stories*

Myths and stories are another important way in which the organisational culture is communicated and kept alive through the informal communication network (Treviño et al., 2011). People can spend much of their time serving as organisational storytellers in order to give meaning to their world and life. Myths and stories are perceived as tools that give meaning to the organisational culture. According to Martins, in Robbins et al. (2010), myths and stories contain narrative events about the organisation's founders, rule-breaking, rags-to-riches successes, reductions in the workforce, relocation of employees, reactions to past mistakes, and organisational coping. These myths and stories anchor the present in the past and provide explanations and legitimacy for current practices (Mullins, 2010).

#### *e) Language*

According to Mullins (2010) and Treviño et al. (2011), an organisational culture develops and uses specific types of language to communicate values to employees. Organisations use language as a way to identify members of a culture or subculture. Martins, in Robbins et al.

(2010) and Luthans, Youssef-Morgan and Avolio (2015), indicate that by learning this language, organisational members confirm their acceptance of the culture and, in so doing, help to preserve it. Treviño et al. (2004) indicate that it is difficult to discuss the issue of organisational ethics without an acceptable vocabulary to support this discussion. The same authors propose that the communicators of values in the organisation are called on to play an important role in providing workers with a language that can be used to discuss and analyse organisational problems from an ethical perspective.

#### **2.2.4. Kaptein's Corporate Ethical Virtues Model**

According to Kaptein (2008), the Corporate Ethical Virtues model is grounded in Solomon's virtue-based theory of business ethics. With regard to this theory, individual business people, as well as business organisations, should possess certain characteristics, i.e. virtues, in order to excel in terms of morality. The virtuousness construct has, until recently, been out of favour in the academic community. Recently, Cameron and McNaughtan (2014), as well as Chapman, Brigh, Winn and Kanor (2014), view the virtuousness variable as being relativistic, culture-specific and associated with social conservatism, religious or moral dogmatism and scientific irrelevance. Scholarly research has paid scant attention to virtuousness, especially in organisations. Seligman (2002) contends that virtuousness in organisations refers to the transcendent, elevating behaviour of the organisation's members. Virtuousness refers to features of the organisation that engender this value on the part of its members. Therefore, a general definition of organisational virtuousness includes individuals' actions, collective activities, cultural attributes, and processes that enable dissemination and perpetuation of virtuousness in organisations (Cameron et al., 2014).

Sekerka, Comer and Godwin (2014) draw attention to the role that virtuousness can play in an organisation through its culture. These authors posit that the virtuousness of an organisation can be determined by the extent to which the organisational culture stimulates employees to behave and act ethically and prevents them from acting unethically. In spite of this, corporate ethical virtues are perceived as organisational conditions for ethical conduct that reflect the capacity of an organisation to stimulate the ethical conduct of employees (Kaptein, 2008). To define these sets of virtues, Kaptein conducted an in-depth qualitative research analysis of 150 cases that included various types of unethical employee conduct caused by the organisational culture. The results of this analysis and categorisation of the organisational factors that positively contribute to the unethical conduct of workers were the identification of seven virtues (Kaptein, 1998; 2008).

This set of generic and procedurally oriented virtues was found to fit and be applicable to any kind of business organisation. Thus, Heugens, Kaptein and Van Oosterhout (2006) indicate that it differs from the construct of ethical climate because of its content orientation, which is much more situation-dependent, and also because Victor and Cullen did not apply it as a normative model. For example, Kaptein (2008) posits that it is unclear whether or not a climate of independence, which is one of the five components of ethical climate identified by Victor and Cullen (1988), is morally desirable.

Kaptein (2008) groups the seven virtues into three constellations. The first two virtues are related to the self-regulating capacity of the organisation, the next two to the self-providing capacity of the organisation, and the last three to the self-correcting or self-cleansing capacity of the organisation. Figure 2.2 below illustrates the seven virtues that constitute the organisational factors contributing to unethical behaviours.

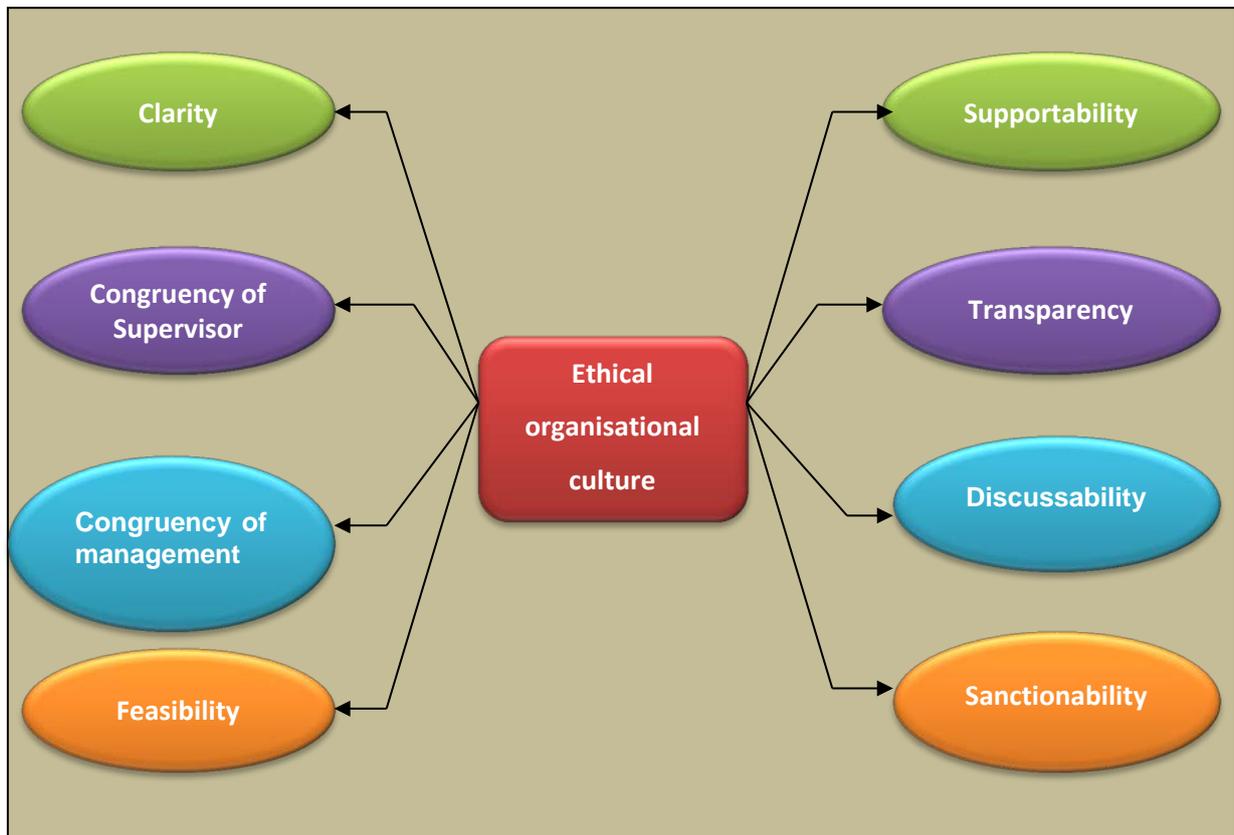


Figure 2.2. Corporate Ethical Virtue Model (Kaptein, 2008).

#### 2.2.4.1 *The organisational virtue of clarity*

According to Kaptein (2008), the virtue of clarity refers to the normative expectations regarding the conduct of employees. These expectations, such as values, norms, rules and regulations, should be concrete, comprehensive and understandable. Employees in business settings are presently confronted with ethical issues that differ from those encountered in other social settings. The advocates of business ethics, such as Crane and Matten (2012), as well as Velasquez (1982), list many ethical issues which are specific and unique to the business setting. These ethical issues include a company's obligation to be honest with customers, its responsibility to preserve the environment, protect employees' rights, ethically manage the ethical conflicts that develop from conflicts between the differing interests of company owners and their employees, customers and surrounding community, as well as issues such as producing a reasonable profit for the company's shareholders with honesty business practices, safety in the workplace and broader environmental and social issues (Crane & Matten, 2012).

#### 2.2.4.2 *The organisational virtue of congruency*

According to Huhtala, Kangas, Lämsä and Feldt (2013), the virtues of congruency fall into two categories: congruency (ethical role modelling) of supervisors and congruency of senior management. Organisations may stipulate clear normative expectations in order to ensure employee compliance, but if supervisors' and managers' behaviour, as a source of normativity, contradicts these expectations, employees will be receiving incongruent or inconsistent signals. However if the management behaviour is aligned with the normative expectations of the organisation, the message to employees to comply with the said expectations is reinforced. A study conducted by Kaptein (1998) reveals that many instances of unethical conduct by employees were motivated by the example set by a supervisor, manager or board member engaging in unethical and prohibited conduct. These kinds of malpractices, bad influences and unethical conduct by leaders in relation to their employees can be observed in many under-developed African countries in general and DRC in particular. Huhtala et al. (2013) indicate that a manager who behaves unethically will not only contradict existing ethical expectations but also set an example which could signal employees that unethical actions are permitted in the organisation. This in turn, could lead the organisation to open doors of ethicality (Kaptein, 2011).

#### 2.2.4.3. *The organisational virtue of feasibility*

The virtue of feasibility refers to the extent to which the organisation creates a platform which permits its members to comply with the norms expected. Kaptein (2008; 2009) views this virtue as the extent to which the organisation creates an atmosphere which enables employees to comply with normative expectations. If employees find it difficult to realise the scope of their tasks and responsibilities, the risk of unethical conduct could be higher. In this case, in order to avoid the increased risk of unethical conduct, organisations should allocate sufficient time, budget, equipment, information and authority to enable management and employees to carry out their responsibilities. Kaptein (2009) supports this view and states that unethical conduct occurs when employees lack adequate or sufficient time, budget, equipment, information and authority to fulfil their tasks. Treviño et al. (2006) also point out that individuals under increased time pressure are less inclined to pay attention to the legitimate expectations and interests of others than those who have sufficient time at their disposal. An organisation which provides employees and managers with the required resources such as time, financial ones, equipment, information and also personal authority to act according to the norms and values without pressure to break the rules will be more likely to increase the employees' levels of engagement, commitment and performance (Huhtala, Kanges, Lämsä & Feldt, 2013).

#### 2.2.4.4. *The organisational virtue of supportability*

Supportability refers to the extent to which an organisation creates support among employees and managers in order to meet normative expectations (Kaptein, 2008). This virtue acts as an antecedent to (un) ethical or ethical conduct within organisations. Kaptein (1998) is of the opinion that demotivated and dissatisfied employees are likely to behave unethically. In other words, when employees feel that they are not being treated fairly, they might try to balance the scales of justice by deliberately causing damage to the organisation. Kaptein (2008, p.7) reiterates this view, asserting that "mistrust and a hostile work environment make it difficult, even impossible, for employees to comply with the ethical standards of the company". A work environment that encourages employees to identify with the values of the organisation will cause them to become intrinsically motivated and to comply with the ethical standards of the organisation (Kaptein, 2008).

#### 2.2.4.5. *The organisational virtue of transparency*

Transparency refers to visibility in the organisation (Kaptein, 2008). Today, society expects heightened levels of transparency from all kinds of institutions – governments, universities, public entities, advocacy groups and businesses – reflecting the reality that in the course of ordinary operations, institutions of all kinds have an impact on people. The King Report III postulates that employees can only be held responsible if they know or could have known what the consequences of their actions will be. Employees who are informed about the nature of the consequences of their behaviour are deprived of the opportunity to account for, modify or alter their conduct. Ruiz-Palomino and Martínez-Cañas (2014) go on to comment that this might lead to a situation where employees only focus on the action, without regard for its consequences. In a work environment with a high level of visibility or transparency, employees will succeed in modifying, correcting or aligning their behaviour to that of their co-workers, supervisors or subordinates (Kaptein, 2011). Conversely, a work environment with low visibility or transparency diminishes the control environment, which widens the scope for unethical conduct. The advocates of transparency emphasise the importance of visibility, not only for its potential to expose unethical behaviour, but also for acting as a deterrent due to the perceived probability of getting caught (Kaptein, 2008; McCabe, Treviño & Butterfield, 1996).

#### 2.2.4.6. *The organisational virtue of discussability*

According to Kaptein (2008), the virtue of discussability gives employees the opportunity to raise and discuss ethical issues in their organisations. Many examples of unethical behaviour (Kaptein, 1998) were partially attributed to an organisational culture with a low level of discussability. Kaptein (2009) goes on to comment that in such a closed culture, criticism is neither encouraged nor accepted. Employees figuratively close their ears and eyes to what they do not want to hear or see. Ruiz-Palomino et al. (2013) draw attention to the fact that such an environment is often characterised by negative information and a tendency to kill the messenger, screen bad news or pay lip service. The advocates of ethical culture have the opinion that the opportunity to learn from others' near mistakes, transgressions and dilemmas is lost if employees are not given adequate scope to exchange, analyse and discuss their experiences (Kaptein, 2008; 2009).

#### 2.2.4.7. *The organisational virtue of sanctionability*

The last organisational virtue in the corporate ethical virtue model is that of sanctionability. Kaptein (1998) reports a range of unethical behaviours that are tolerated or even encouraged, in turn creating the perception among perpetrators that their conduct will go unpunished or that it will even be appreciated by management. The lack of enforcement of sanctions undermines the effectiveness of norms. According to Kaptein (2011), sanctions are an important behavioural stimulus and relevant source of normativity. Employees will steer clear of misbehaviour if they expect it to be punished and if the severity of punishment outweighs the potential reward. Folglia, Cohen, Pearlman, Bottrell and Fox (2013) draw attention to the concept that when leaders reward employees for unethical behaviour or fail to punish them for engaging in such behaviour, they send a clear message that unethical behaviour is tolerated, desirable or acceptable in their work environment. Sanctions are imposed not just for the sake of perpetrator and victim, but also for the benefit of onlookers (Kaptein, 2009).

### **2.3. ETHICAL CLIMATE**

The following section will discuss the conceptualisation of organisational climate, theoretical ethical climate model and empirical model of ethical climate.

#### **2.3.1. Conceptualisation of organisational climate**

The concept of organisational climate has been extensively researched since the mid-1960s (Field & Abelson, 1982; Schneider, 1983; Ng & Ng, 2014). To the present reviews of literature on organisational climate have been published (Denison, 1996; Dickson, Smith, Grojean & Ehrhart, 2001; Forehand & Gilmer, 1964; Litwin & Stringer, 1978). The organisational climate construct is considered to be a meaningful concept with significant implications for understanding human behaviour in the organisational setting (Castro & Martins, 2010, Cotton, 2004; Villamizar Reyes & Castañeda Zapata, 2014). Field and Albelson (1982) clearly emphasised the importance of the organisational climate construct, stating that it provides a conceptual link between analysis at the organisational and individual level. Guion (1973, p.120) stated that “the construct...implied by the term organisational climate, may be one of the most important to enter the thinking of industrial and organisational psychologists in many years.” This is made clear through studies and

research on organisational climate (Ali & Patnaik, 2014; Campbell, Dunnette, Lawler & Weick, 1970).

Victor and Cullen (1988) have also commented on the relationship between ethical climate and ethical culture. They point out that the two multidimensional constructs of ethical climate and ethical culture were developed more or less independently and were based on different theoretical points of reference and assumptions. Victor et al. (1988) also reviewed research that attributes differences between the concepts of “climate” and “culture” to differences in theoretical roots, as the preferred research methodology and perspective, rather than to substantive differences. These authors utilised organisational climate constructs in addition to ethical culture variables in evaluating the ethical context of organisations (Painter-Morland, 2008).

Many definitions of organisational climate have been presented in various studies on the concept. However, these definitions have failed to reach a consensus on the concept and fail to establish clear guidelines regarding the measurement and theory of organisational climate (Glick, 1985). Dickson et al. (2001) provide explanations for this by indicating that during the exploratory phase as regards organisational climate, researchers were concerned about gathering data and assessing the validity of the concept, rather than devoting time to debating definitions and elaborating on the possible nuances of organisational climate. Patterson, West, Shackleton, Dawson, Lawthorn and Maitlis (2005) after reviewing numerous definitions of organisational climate came to the conclusion that no precise and uniform definition of this concept exists. The lack of consensus among researchers regarding the definition of organisational climate has made the operationalisation of the construct inconsistent (Patterson et al., 2005).

The earliest and most widely accepted definition (Jones & James, 1979; Johannesson, 1973; Moran & Volkwein, 1992; Woodman & King, 1978) of organisational climate is that of Forehand and Gilmer (1964), who perceive organisational climate as a set of characteristics that describes an organisation, distinguishes it from other organisations, is relatively long-lasting and can influence the behaviour of individuals within the organisation. The concept of organisational climate is described as an individual perception or psychological climate. There was no attempt to restrict the definition to perceptions shared by members of a work group or organisation. As indicated elsewhere (Schneider & Bartlett, 1970, p. 5), “... what is psychologically important to the individual must be how he perceives his work environment, not how others might choose to describe it...” Schneider (1973) found that the longer an

individual had been in contact with an organisation, the more difficult it would be to change his or her climate perceptions.

Litwin and Stringer (1998) operationalised the definition of organisational climate as the sum of individual perceptions by those working in the organisation. Reichers and Schneider (1990, p.22) posited that it is the “shared perceptions of the way things are around here”. Organisational climate is viewed as an important concept that pinpoints the organisation’s goals and ways in which to achieve these goals. Holloway (2012) and Hannevik, Lone, Bjørklund, Bjørkli and Hoff (2014) contend that organisational climate is the formal and informal shared perceptions of organisational policies, practices and procedures. In terms of relationships among organisational members (Holloway, 2012), organisational climate focuses on its members’ perceptions of the way things are. It is the sum total of individuals’ perceptions and attitudes towards their organisation at any given time (Eustace & Martins, 2014).

For the purpose of this study, organisational climate is defined as the surface manifestation of organisational culture, which consists of the conscious behaviour, such as feelings or perceptions and attitudes, that are shared by individuals in an organisation at a particular time regarding the fundamental elements of the organisation, and which can positively and negatively affect the behaviour of organisational members in terms of organisational effectiveness (Eustace & Martins, 2014). The next section briefly explores the different models of ethical climate.

### **2.3.2. Victor and Cullen’s ethical climate model**

Victor and Cullen (1987; 1988) developed a framework for measuring the perception of ethical orientation by focusing on the theoretical school of moral philosophy (Fritzsche & Becker, 1984; Williams, 1985), as well as ethical ideologies and psychological cognitive development theories (Kohlberg, 1983). Victor and Cullen (1987; 1988) introduced the study of ethical climate. These authors offer explanations for the existence of constellations of work climate based on assumptions regarding the organisational environment (Golparvar & Azarmonadadi, 2014), socio-cultural and institutionalised societal norms, organisational structure (Blau, 1970; Ouchi, 1980), and organisational history (i.e. anthropological basis) (Golparvar et al., 2014).

Ethical climate is a component of general organisational climate. According to Victor and Cullen (1987, p. 51-52), the ethical climate construct refers to “shared perceptions of what is ethically correct behaviour and of how ethical issues should be handled”. Victor and Cullen (1987) draw attention to the fact that the ethical climate of an organisation influences the criteria brought to bear on decision-making processes. Goldman and Tabak (2010) contend that this definition includes perceived prescriptions, proscriptions and permissions regarding moral obligations within the organisation. Ethical climate is also viewed as norms that indicate how ethical issues are resolved, and as such, ethical climate is a subset of organisational or work climate. It comprises perceptions of organisational practices and procedures that have ethical dimensions. Furthermore, ethical climate influences the quality of ethical reasoning processes (Goldman et al., 2010).

Goldman and Tabak. (2010) indicate that organisations have distinct types of ethical climates. Focusing on internal processes and rational goals, Victor and Cullen (1987; 1988) propose two models that could help to measure the ethical climate of an organisation by combining the ethical criterion and locus of analysis.

### **2.3.3. The theoretical ethical climate model**

Theoretically, ethical climate is a function of ethical decision criteria or rules, coupled with the locus of analysis used by organisational members. According to Goldman and Tabak (2010), the ethical criterion draws from cognitive moral development theories and is determined by ethical reasoning structures. This dimension is based on the theoretical school of moral philosophy (Fritzsche & Becker, 1984), as well as ethical ideologies and psychological cognitive development theories (Kohlberg, 1983). The ethical criterion dimension is composed of three classes of ethical theory, namely egoistic (hedonism), benevolence (utilitarian) and principled (deontological).

#### *2.3.3.1 Egoistic climates or hedonism*

Egoistic climates refer to a behaviour tendency that is essentially self-interested, with the aim being to seek pleasure and escape pain. In this type of climate, the decision-maker usually opts for the alternative that will best satisfy his/her needs, ignoring the needs or interests of others (Cullen, Parboteeah & Victor, 2003). Egoism claims that one should choose those actions that result in the most good for oneself (Rosen, 1978). Cullen et al. (2003) highlight the fact that within an egoistic climate, the individual's self-interest becomes

the expected primary source of moral reasoning when a decision has to be made. This means that the needs or interests of others in the same department or organisation are of less concern (Victor & Cullen, 1987; 1988). In addition, in the egoistic climate, norms encourage a focus on personal gains. The expectation is that individuals do not care about the well-being of others (Cullen et al., 2003).

#### 2.3.3.2. *Benevolence climates or utilitarianism*

Benevolence climates refer to the behaviour tendency that is concerned with the well-being of others (Victor & Cullen, 1987; 1988). In other words, the decision-maker seeks the alternative that is best suited to joint interests, even if it means a lower level of satisfaction of one's own needs (Weber, Kurke, & Pentico, 2003). An individual who perceives a benevolence climate to exist will most likely act and make decisions that provide the greatest good for the greatest number of people involved. Such individuals view their work environment as having a sincere interest in the well-being of others (Cullen et al., 2003; Martin & Cullen, 2006).

#### 2.3.3.3. *Principled climates or demonological*

Principled climates refer to the application or interpretation of rules, laws and standards in the normative expectations of the social unit (Victor & Cullen, 1988). In general, when faced with a moral dilemma, organisational or group norms suggest that the decision-maker resorts to decisions that are based on adherence to and compliance with rules and codes. Cullen et al. (2003) and Victor and Cullen (1988) argue that the expected sources of principles for such moral reasoning can be internal to an individual, such as with a principled-individual climate, or external, such as with a local ethical code (principled-local) or a broader code such as the Bible or laws (principled-cosmopolitan).

Martin and Cullen (2006) indicate that the dimension of locus of analysis originates with sociological theory (e.g. Merton, 1968) and its application to organisational contexts (Gouldner, 1960). The emerging referent sources from two theoretical contributions (Martin et al., 2006) helped to conceptualise the specific levels at which decision-making is determined and behaviour is operationalised. These levels or loci of analysis were categorised as local and cosmopolitan, and Victor and Cullen (1988) then added the individual level. According to Victor and Cullen (1988), the referent could be the "individual," in which the basis for ethical decision-making comes from within the individual's personal

moral beliefs and values. However, Wimbush, Sheppard and Markham (1997) posit that if the ethical referent comes from the practices and policies of the organisation or organisational subunit, such as department or division, the referent is considered to be “local.”

A cosmopolitan referent (Wimbush et al., 1997) is external to the individual and the organisation. The cosmopolitan locus refers to the community or society at large (Goldman & Tabak, 2010). Combining internal processes (locus of analysis) and rational goals (ethical criterion) in the three-by-three matrices, Victor and Cullen (1987; 1988) theoretically describe nine ethical climates, which are accompanied by specific normative expectations (Figure 2.3 below). Each climate type indicates a unique underlying ethical decision criterion that is expected to guide decision-makers in the organisation. Detailed definitions of the nine ethical criteria are provided by various authors (Barnett & Vaicy, 2000; Elçi & Alpan, 2009; Upchurch & Ruhland, 1995; Victor & Cullen, 1988).

		LOCUS OF CONTROL	
		INDIVIDUAL	COSMOPOLITAN
ETHICAL CRITERION	EGOISM	SELF-INTEREST	COMPANY PROFIT
	BENEVOLENCE	FRIENDSHIP	TEAM INTEREST
	PRINCIPLE	PERSONAL MORALITY	COMPANY RULES AND PROCEDURES

Figure 2.3. Theoretical strata of ethical climate (Victor & Cullen, 1987; 1988).

- (i) Self-interest (egoistic moral judgement and individual locus of analysis): Egoism at this level promotes the consideration of the needs and preferences of one’s own self (e.g. personal gain, self-defence). Self-interest may be defined in terms of physical well-being, pleasure, power, happiness or other criteria that promote the interests of the individual.

- (ii) Company profit (egoistic moral judgement and local locus of analysis): At the local locus of analysis, ethical decisions are influenced by the work group's beliefs, while a company profit-type ethical climate refers to the situation whereby individual decisions reflect the organisation's best interests (corporate profit, strategic advantage).
- (iii) Efficiency (egoistic moral judgement and cosmopolitan locus of analysis): In this type of ethical climate, ethical decisions are influenced by general social or economic interests.
- (iv) Friendship (benevolent moral judgement and individual locus of analysis): This type is based on the criterion of consideration of other people, emphasising the interests of one's friends without reference to the organisational membership (e.g., friendship, reciprocity).
- (v) Team interest (Benevolent moral judgement and local locus of analysis): This type of climate is based on the consideration for the organisational collective (esprit de corps, team play).
- (vi) Social responsibility (benevolent moral judgement and cosmopolitan locus of analysis): In this type of climate, ethical decisions are influenced by external factors that guide socially responsible behaviour.
- (vii) Personal morality (principled moral judgement and individual locus of analysis): in the individual locus of analysis the principles are self-chosen, and one is expected in this climate to be driven by his/her personal ethics.
- (viii) Company rules and procedures (principled moral judgement and local locus of analysis): This climate type, the source of ethical principles, stems from the organisation's rules and procedures.
- (ix) Laws and professional codes (principled moral judgement and cosmopolitan locus of analysis): In this climate, the source of principles transcends beyond the organisation. The source of principles is embedded in the legal system and professional organisations.

#### **2.3.4. The empirical ethical climate model**

From the theoretical framework, the Ethical Climate Questionnaire (ECQ) was developed to measure various perceptions of ethical climate grounded on the theoretical bases of egoistic, benevolent and principled reasoning (Cullen, Victor & Bronson, 1993; Martin & Cullen, 2006). This instrument is the most widely accepted and used measure of ethical climate (Fritzsche, 2000). This measure of the construct, which was proposed by Victor and Cullen

(1987, 1988), has been employed to understand the prevailing perceptions of ethical climate within organisations. Various studies have observed the perceptions of all climate types in ethical research (Martin & Cullen, 2006; Simha, Stachowicz-Stanusch, Adcroft, Adcroft, 2015). The five climate types identified initially by Victor and Cullen (1987, 1988) are also found in similar studies (Martin et al., 2006). In their empirical manifestations, these ethical climate types are known as instrumental, caring, independence, law and code, and rules. Figure 2.4 below shows these five common empirical derivatives of ethical climate as they unfold in relation to the original theoretical matrix proposed by Victor and Cullen (1987; 1988) (see figure 2.4).

		LOCUS OF ANALYSIS		
		INDIVIDUAL	LOCAL	COSMOPOLITAN
ETHICAL THEORY	EGOISM	INSTRUMENTAL		
	BENEVOLENCE	CARING		
	PRINCIPLED	INDEPENDENCE	RULES	LAW AND CODE

Figure 2.4. Five common empirical derivatives of ethical climate (Martin & Cullen, 2006; Neubaum, Mitchell & Schminke, 2004; Victor & Cullen, 1987).

As Martin et al. (2006) clearly indicate, research reveals that perceptions of normative expectations for forms of ethical reasoning tend to blur levels of analysis, with the exception of principled reasoning climates. The nature of each of the common empirically identified climate types is described as follows:

#### 2.3.4.1. *Instrumental*

Individuals perceiving an instrumental ethical climate view their organisational unit as having norms and expectations that encourage ethical decision-making from an egoistic perspective (Martin et al., 2006). The most important aspect is that the individual perceives self-interest to guide behaviour, even to the possible detriment of others. In this case, one can

hypothesise that decisions are made to serve the organisation's interests or provide personal benefits (Martin et al., 2006; Wimbush, Sheppard & Markham, 1997).

#### 2.3.4.2. *Caring*

The caring climate construct is embedded in the benevolence theory, or in terms of moral philosophy and utilitarianism. Various studies assessing an individual's preferred work climate have been conducted (Chye Koh & Boo, 2004; Cullen et al., 2003; Martin et al., 2006). In a caring climate, individuals perceive that decisions are and should be based on an overarching concern for the well-being of others. Martin et al. (2006) argue that in this atmosphere, individuals perceive that ethical concerns exist for others within the organisation, as well as for society at large. Concern for and consideration of others is perceived by organisational members to be supported by the policies, practices and strategies of the organisation (Martin et al., 2006).

#### 2.3.4.3. *Independence*

In this climate, actors believe that they should act in accordance with personal moral convictions when making ethical decisions. In their view of the organisation, decisions with moral consequences should be based on personal moral beliefs, with minimal focus on external forces and influences on ethical dilemmas. The actors' principles, upon which decisions are made, are presumably determined through careful consideration (Martin et al., 2006). According to Watley (2014), personal morality, at the intersection of principle and individual dimensions of the typology, is the basis on which the independence climate is created.

#### 2.3.2.4. *Law and code*

This climate is based on the perception that the organisation supports principled decision-making based on external codes such as the law, Bible or professional codes of conduct. Martin et al. (2006) contend that with decision-making situations in such a climate, it is believed that individuals should make decisions based on the mandate of some external system (complying with the requirements of the law in order to avoid breaking it). In this climate, it is the external codes that are perceived to govern an individual's ethical decision-making and behaviour in the work environment (Martin et al., 2006; Peterson, 2002).

#### 2.3.4.5 *Rules*

This refers to the organisational rules and procedures that emerge empirically in the rules climate. Organisational decisions are perceived to be guided by a strong, pervasive set of local rules or standards, such as codes of conduct (Briggs, Jaramillo & Weeks, 2012). Certainly, the multifaceted codes of conduct increasingly being implemented by organisations in the contemporary corporate landscape appeal primarily to this theoretical component of ethical climate. The codes of conduct, as a thermometer by means of which managers are evaluated, reveal the rules component of the ethical climate construct (Abuzaid, 2014).

### **2.4. ETHICAL LEADERSHIP**

Leadership theory is vast and diverse, with numerous implications for professional practices (Bass & Bass, 2008; Yammarino, Salas, Serban, Shirreffs & Shuffler, 2012; Yukl, 2009). However, traditional and contemporary leadership research, both scientific and empirical, has emphasised, first and foremost, the leader as an individual, and has been limited to leader-follower interactions in small groups, teams and sometimes dyads (Yammarino et al., 2012). Given the increasing scandals that occur in the business environment (with the investigation into Enron's collapse), new approaches that consider the moral aspects or dimensions of leaders are required (Painter-Morland, 2008).

#### **2.4.1 Conceptualisation of leadership**

Conducting research in the traditional and contemporary leadership field in a short space of time is a challenge, to say the least. Numerous books and handbooks (Bass & Bass, 2008; Yukl, 2009), as well as comprehensive review articles (Yammarino et al., 2012) and entire journals (e.g. *Leadership Quarterly*), have been devoted to this topic. Nevertheless, among all these abovementioned literature sources, leadership is viewed as a leader-follower interaction process that occurs in small groups, teams, and sometimes dyads. This process takes place in a particular situation (context) whereby one person, the leader, and other people, the followers or subordinates, share a common purpose (vision and mission) and accomplish things together (e.g., goals, objectives and tasks).

Stodgill (1974) perceives leadership to be a fundamental element of an organisation and its functioning. According to this view, leadership is a process whereby one person (leader) influences the activities of an organised group, facilitating and promoting the setting and achievement of group goals (Stodgill, 1974). Irrespective of the scope of influence, a definitive and vital role of leadership is the ability to influence, shape and direct the behaviour of followers, recognising the leader's power over the destiny of fellow human beings and the course of human history (Yukl, 2006).

Northouse's (2010) review of leadership literature describes three basic ways to explain how people become leaders: the trait leadership theory, the great man theory and the process leadership theory. Trait theory refers to a situation whereby certain personality traits may lead individuals naturally into leadership roles (Yukl, Mahsud, Hassan, & Prussia, 2013). A crisis or important fact may cause an individual to rise to the occasion, which brings out extraordinary leadership qualities in an ordinary individual – this is the great man theory. The process theory (Chirchir, Kemboi, Kirui, & Ngeno, 2014) refers to the situation whereby leadership skills are acquired by individuals.

Recently, there has been a need for empirical research to comprehend the influence of leaders on ethical practices and employee behaviours (Jordan, Brown, Treviño, & Finkelslein, 2013). Based on the theory and research of Bass and Bass (2008), Brown and Treviño (2014), Cuilla (2004), and Brown and Mitchell (2010), researchers have sought to define ethical leadership from two perspectives, namely normative and social scientific or descriptive approaches to business ethics.

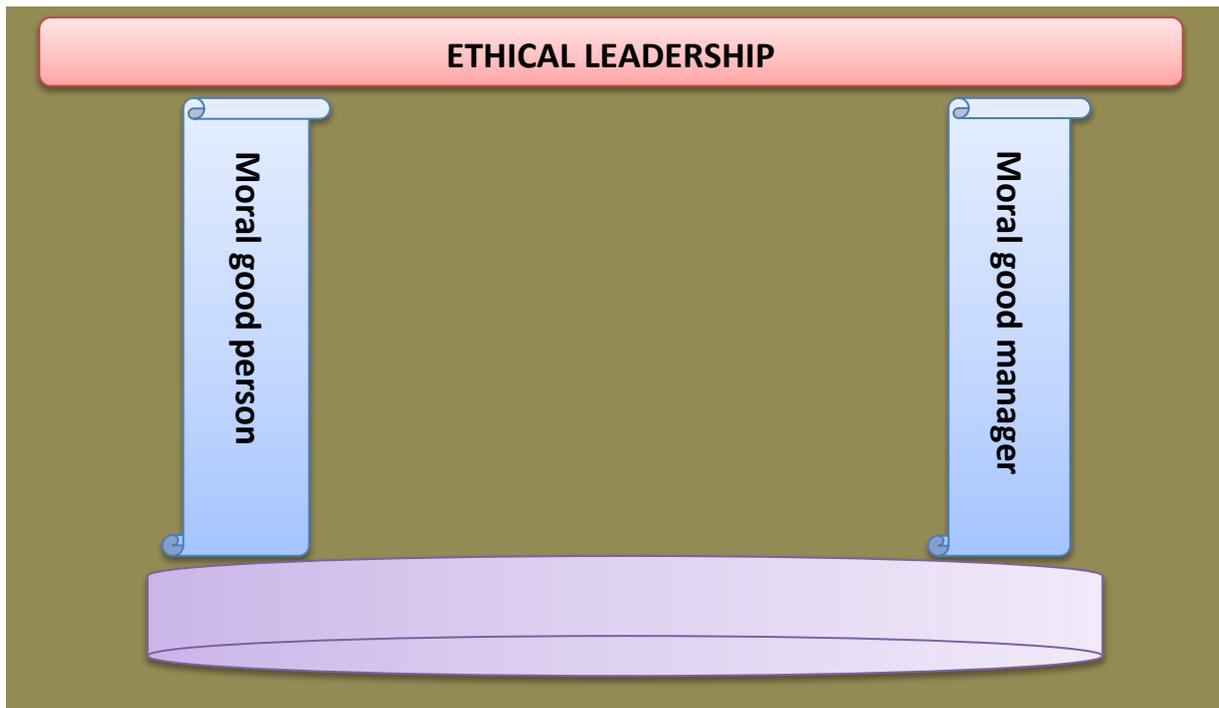
#### *2.4.1.1. Normative approach*

The normative perspective is rooted in philosophy and is concerned with prescribing how individuals ought to or should behave in the workplace environment. The advocates of the normative approach towards ethical leadership (Arvey, Wernsing, & Palanski, 2012; Ciula, 2004) investigate ethical decision making from certain philosophical points of view, evaluate the ethicality of various leaders, and consider the degree to which certain styles of leadership or influence tactics are ethical. The norms that are thus developed are typically based on the principles of role-responsibilities. In spite of this, the work of Cuilla (2004) is regarded as emblematic in many respects with regard to this normative approach to leadership in the field of business ethics. In response to some leadership theories that equate good leadership with effective leadership, Cuilla (2004) and Painter-Morland (2008)

suggest that leaders have to demonstrate both ethical and effective behaviour. In other words, effective leadership does not automatically translate into ethical leadership. According to Painter-Morland (2008), ethical leadership requires a sustained commitment to the highest ethical standards. In terms of the philosophical orientation of the normative approach, Cuilla's (2004) proposals are deontological and teleological. She posits that leaders' decisions and actions should always be informed, at all times, by a sense of duty, and should be directed at realising the greatest possible good.

#### 2.4.1.2. *Social scientific approach*

The social scientific perspective is rooted in the fields of psychology, sociology and organisational science, and attempts to determine how individuals perceive ethical leadership, as well as the antecedents, outcomes and potential boundary conditions of those perceptions. According to Brown et al. (2010), their study focused on investigating research questions such as the following: What is ethical leadership? (Brown & Treviño, 2014; Treviño, Brown & Hartman, 2003); what traits are associated with perceived ethical leadership? (Walumbwa, Morrison, & Christensen, 2012); How does ethical leadership flow through various levels of management within organisations? (Mayer, Aquino, Greenbaum, & Kuenzi, 2012), and Does ethical leadership help or harm a leader's promotability within an organisation? (Rubin, Dierdorff, & Brown, 2010). Some of the early formal research focused on defining ethical leadership from a descriptive perspective (Treviño et al., 2003). These qualitative studies (Treviño et al., 2003) revealed that ethical leaders are described in terms of two main pillars: a morally good person, and a morally good manager. The former refers to the qualities of the ethical leader as a person.



*Figure 2.5. Pillars of ethical leadership (Treviño et al., 2000).*

Ruiz, Ruiz and Martinez (2011) perceive a morally good person as an individual who possesses the traits of fairness, justice, honesty on the job and respect for employees. Brown et al. (2010) point out that a moral person is characterised by honesty and trustworthiness. Moral people demonstrate a strong concern for others and are also approachable and listen to others. Employees can come closer to these individuals with issues and concerns, knowing that they will be heard. In addition, a moral person has a reputation for being fair and principled. They are also viewed as being consistent in their personal and professional lives (Brown et al, 2010).

The phrase moral manager refers to how an individual leader uses the tools of his or her position to promote ethical conduct in the workplace. According to Brown et al. (2010), moral managers see themselves as role models in the workplace. They enforce ethical norms by modelling ethical conduct to their followers. They establish and communicate ethical standards and use rewards and punishment as a means to ensure that the standards are followed and respected. In summing up, Brown and Treviño (2014) posit that leaders who are moral managers “walk the talk” and “talk the walk,” thereby aligning their behaviour and organisational processes to moral standards.

Jordan, Brown, Treviño and Finkelstein (2013) draw attention to the fact that individuals in leadership positions need to be strong moral people and moral managers in order to be regarded as ethical leaders by those around them. To summarise, the moral person pillar of ethical leadership represents the substance of ethical leadership. It is a prerequisite for developing a reputation for ethical leadership, since leaders become associated with their traits, behaviours and decisions, as long as others know about them (Bedi, Alpaslan & Green, 2015). The next section briefly explores the different models of ethical leadership.

## **2.4.2 Brown and Kalshoven's models of ethical leadership**

The social learning theory (SLT) of Bandura (1977, 1986) and the social exchange theory (SET) of Blau (1964), provide the paradigmatic foundation for the conceptualisation of the ethical leadership construct. Brown and Treviño (2006) indicate that SET and SLT constitute the theoretical basis that explains the relationship between ethical leadership and follower behaviours.

### *2.4.2.1. Brown's model of ethical leadership*

In the last few decades, models of ethical leadership have been the topic of several academic discussions (Detert, Treviño, Burris & Andiappan, 2007; Piccolo, Greenbaum, Den Hartog & Folger, 2010), and a number of practitioner-oriented, popular press books (Kanungo & Mendoca, 2007), as well as ethical scandals in the world of business (Brown, Treviño & Harrison, 2005; Colvin, 2003). This has raised important questions about the role of leadership in shaping ethical conduct. Employees, in most cases, look outside themselves to significant others for ethical guidance (Brown et al., 2005; Kohlberg, 1969; Treviño, 1986). Advocates of ethical leadership also indicate that in the workplace environment, leaders should play the role of guides or models for their followers (Treviño et al., 2010). For instance, Brown et al. (2005) developed the 10 item Ethical Leadership Scale, which is currently used to measure ethical leader behaviour. This scale combines different attributes and characteristics that pertain to good leadership (Toor & Ofori, 2009). These positive attributes of leadership include the following: character, honesty, integrity, altruism, trustworthiness, collective motivation, encouragement and justice. Brown et al. (2005) suggest that the combination of honesty and integrity, ethical standards and fair treatment of employees is the cornerstone of ethical leadership.

*(i) Ethical leadership and leader honesty*

According to Brown et al. (2005), survey research has linked leadership effectiveness with leader honesty (i.e. trustworthy), integrity (i.e. principled behaviour) or trustworthiness (i.e. can be trusted). As mentioned above, honesty and integrity are regarded as important components of transformational leaders' idealised influence (Bass, 2008). At first glance (Brown et al., 2005), it might appear that ethical leadership equates to such leader traits. However, Howell and Avolio (1992) highlight the fact that honesty is only one of many characteristics that differentiate ethical from unethical charismatic leaders. Furthermore, Treviño et al. (2000) reveal that traits such as honesty and trustworthiness only contribute to what they term the "moral person" aspects of ethical leadership. They proceed to state that ethical leadership involves moral manager aspects that include a number of visible behaviours which do not necessarily flow only from personal traits, such as sustained communication of ethics-related messages and holding followers accountable for ethical conduct (Brown et al., 2005).

As such, followers who perceive their leader to be a strong ethical person will be more likely also to perceive this leader to be a trustworthy and honest one, and will ultimately therefore be more likely to continue with the exchange relationship development process with that leader (Demirtas et al., 2014). A leader, who is perceived as trustworthy, warrants trust, is dependable, reliable and faithful. In contrast, a leader who is honest does not lie, cheat, steal or take unfair advantage, but is instead honourable, truthful and trustworthy. This individual is characterised not by deception or fraud, but by truthfulness, sincerity and genuineness (Brown, et al., 2005).

*(ii) Ethical leadership and considerate or fair treatment*

Leaders are in a privileged position to apply justice because of their discretionary power, control of resources, and responsibility for important decisions regarding employees. Brown et al. (2005) argue that employee support of leaders is firmly based on fair judgments, with people acting as naïve moral philosophers and judging the actions of leaders against abstract criteria of fairness. Cornelis, Van Hiel and De Cremer's (2012) research has supported this relationship. The closest alignment of fairness with supervisory leadership is embedded in the notion of interactional justice (Roy, Bastounis & Minibas-Poussard, 2012) and its focus on treating followers with dignity and respect, truthfulness and propriety. Furthermore, supervisors have the opportunity to create a fair climate in their work

environment by making decisions that are perceived by employees to be just or fair. Therefore, it is important to determine whether ethical leadership is simply demonstrated considerate behaviour or treatment with dignity and respect (Brown et al., 2005; Treviño et al., 2003).

To grasp and understand ethical leadership and its outcomes, Brown et al. (2005) propose the social learning framework developed by Bandura (1977; 1986). The social learning perspective on ethical leadership proposes that leaders influence the ethical actions of employees via modelling.

### *(iii) Ethical leadership as social learning*

Leadership behaviour involves influence (Mullins, 2010). Social learning perspectives on ethical leadership postulate that leaders exert influence on their direct subordinates via role modelling. As part of the psychological matching processes, role modelling includes observational learning, imitation and identification. Bandura (1986) posits that anything that can be learned from direct experience can also be learned through observing someone's behaviour and its consequences. This process finds meaning in an organisation where the behavioural target is ethical conduct. Employees can learn what is accepted and expected behaviour, as well as what behaviours are rewarded and punished, through leaders' role modelling. Leaders are important agents and sources of such role modelling –firstly by virtue of their assigned role, their status and success in the organisation, and their power to influence both employee behaviours and organisational goals. Being situated on a higher hierarchical position and exerting control over rewards contribute to modelling effectiveness (Bandura, 1986; Brown et al., 2005).

Brown et al. (2005) emphasise the importance of ethics and role modelling, and posit that these two constructs originate from Aristotle's philosophy of the spirit of morality, which can only be respected by witnessing the conduct of a moral person.

### *(iv) Ethical leadership as social exchange*

In addition to SLT, Brown et al. (2005) indicate that the main perspective for understanding the effects of ethical leadership is SET. According to Blau (1964), Cropanzano and Mitchell (2005) and Gouldner (1960), social exchange involves a set of the interactions which lead to several obligations. This process relies on the norm of interaction (Gouldner, 1960),

whereby individuals reciprocate benefits which they have received in the past, in such a way that both members and the relationship create a continuous cycle (Dulac, Coyle-Shapiro, Henderson & Wayne, 2008; Erwin, 2011).

In terms of this, Cropanzano and Mitchell (2005) draw attention to the fact that SET is used as a foundation in many studies on relationships within organisations and workplace behaviour. Social exchange becomes important in the role leaders play in making employees feel obliged to accomplish their task (Yukl, Mahsud, Hassan & Prussia, 2013). Mendonca and Kanungo (2007) argue that in social exchanges, leaders gain status and influence over group members in return for demonstrating task competence and loyalty to the group. However, Hollander and Offermann (1990, p.181) call this type of explanation “a process-oriented transactional approach to leadership” and propose that it emphasises the implicit social exchange or transaction over time that exists between leaders and followers, including reciprocal influence and interpersonal perceptions. In line with the social exchange perspective, ethical leadership is perceived as the tension between altruistic and egoistic motives, and it is suggested that an ethical leader is driven by a system of accepted beliefs and appropriate judgments instead of self-interest, which is beneficial for followers, organisations and society (Kalshoven & Den Hartog, 2009).

In practice, Walumbwa, Mayer, Wang, Wang Workman and Christensen (2011) suggest that followers of ethical leaders are more likely to perceive themselves as being in a social exchange relationship with their leaders because of the ethical treatment they receive and the trust they feel. When employees perceive that their leaders have their best interests at heart and are caring, they are more likely to reciprocate in a positive manner, thereby improving task performance (Walumbwa et al., 2011).

#### *(v) Attention to leaders and leaders' behaviours*

Effective role modelling focuses more attention on the model and the behaviour being modelled or portrayed (Brown et al., 2005). A model's attractiveness is a network or pipeline for channelling observers' attention to the model. If leaders are to be seen as ethical leaders who can influence employees' actions and ethical conduct, they must be legitimate and credible ethical role models, since employees may be cynical about ethical statements coming from certain organisational leaders, especially in a scandalous business environment (Brown et al., 2005).

In order to overcome the challenges associated with such a business environment, leaders should be attractive, credible and legitimate, serving as ethical role models by engaging in on-going behaviours that are evaluated by employees as normatively appropriate and that suggest altruistic (rather than selfish) motivation. Such behaviours include honesty, consideration for others, and fair treatment of employees (including respect and voice) (Yukl et al., 2013).

#### *2.4.2.2. Kalshoven et al's model of ethical leaders' behaviour*

Kalshoven, Den Hartog and De Hoogh's (2011) model differentiates ethical leader behaviour from other leadership styles such as transactional, transformational and servant leadership. This is due to the fact that Brown et al. (2005) suggested a uni-dimensional measure of ethical leader behaviour, followed by Resick and Hanges (2006), Dickson and Mitchelson (2006) and De Hoogh and Den Hartog (2008), who started to investigate ethical leadership as a multi-dimensional construct. Thus, different leader behaviours have been suggested to be part of ethical leadership, including acting fairly, demonstrating consistency and integrity, promoting ethical conduct, being concerned for people, allowing employees to have a voice, and sharing power (Brown et al., 2005; Hoogh & Den Hartog, 2008; Kalshoven et al., 2011). It is true that ethical leader behaviour is multidimensional, but as different ethical leader behaviours are theoretically rather different, they may also have different antecedents and consequences.

A review of the ethical leadership literature suggests several components of ethical leadership in organisations. Thus, Kalshoven et al. (2011) began to incorporate the work of Brown and Treviño, as well as several other authors in the field, as theoretical bases for distinguishing and summarising these behaviours. De Hoogh and Den Hartog (2008) identified three components of ethical leadership (i.e. fairness, power sharing, and role clarification) and related the content of these components to Brown et al. (2005). In addition to these components, Kalshoven et al. (2011) include four others, namely people-oriented behaviour, integrity, ethical guidance and concern for sustainability. Based on De Hoogh et al. (2008), the first three components are fairness, power sharing, and role clarification.

##### *(i) Fairness*

Fairness is perceived as an important form of ethical leader behaviour. Ethical leaders mostly act with integrity and treat employees fairly. They make principled and fair choices,

are trustworthy and honest, do not practice favouritism, and take responsibility for their own actions (Brown et al., 2005; De Hoogh et al., 2008; Kalshoven et al., 2011; Treviño et al., 2003).

*(ii) Power sharing*

Power sharing is also regarded as ethical leader behaviour. According to De Hoogh et al. (2009), ethical leaders involve their employees in the decision-making process and listen to their ideas and concerns. Risick et al. (2006) argue for an empowering aspect of ethical leadership, and Brown et al. (2005) posit that ethical leaders provide employees with a voice. Sharing of power allows employees to have more control and makes them less dependent on their leaders (Kalshoven et al., 2011).

*(iii) Role clarification*

Ethical leaders are considered to be acting in a transparent manner and engage in open communication (Brown et al., 2005). In line with this, De Hoogh et al. (2008) draw attention to the importance of transparency in clarifying performance goals and expectations, and identify role clarification as a component of ethical leadership. Ethical leaders clarify responsibilities, expectations and performance goals, so that employees know what is expected from them and understand when their performance is up to standard. In such an environment, employees do not worry unnecessarily about unclear expectations and know how they can meaningfully contribute to meeting the unit's or organisation's goals (Kalshoven et al., 2011).

*(iv) People orientation*

People orientation refers to having true concern for others. This component was one of the most frequently mentioned aspects of ethical leadership in Treviño et al.'s (2003) qualitative study. Risick et al. (2006) perceive ethical leaders as people-oriented. This component of ethical leadership is demonstrated by genuinely caring about, treating with respect and dignity and supporting employees, and where possible ensuring that their needs are met (Kalshoven et al., 2011; Treviño et al., 2003).

*(v) Ethical guidance*

It is evident that ethical leaders convey standards regarding ethical conduct. Organisations and top management set rules, standards and codes of conduct, which provide guardrails or guidelines for ethical behaviour (Kalshoven et al., 2011), and leaders can raise employees' awareness of such guidelines. Brown et al. (2005) emphasise that ethical leaders guide employees in setting priorities and in the ethical dilemmas that they encounter. Ethical leaders also use rewards and punishment to hold employees accountable for their actions (Treviño et al., 2010).

*(vi) Concern for sustainability*

Treviño et al.'s (2003) research suggests that ethical leaders are characterised by a broad notion of ethical awareness. This awareness implies that such leaders are concerned about their impact on stakeholders and society. In this regard, the stakeholder literature suggests that ethical leaders have a full responsibility to protect and promote the interests of their stakeholders (Fontain, Haarman & Schmid, 2006). Similarly, Wang and Hackett (2015) assert that ethical leaders take the effects of their behaviour on society and the surrounding environment into account. The importance of the broader view on others in the organisation and society, as well as on the natural environment, is also found in the corporate responsibility literature (Weldman, Siegel & Javidan, 2006).

*(vii) Integrity*

Integrity is a key attribute of ethical leadership. De Hoogh et al. (2009) view integrity as a fundamental component of a person's character, and as entailing the ability to determine and engage in morally correct behaviour. Integrity is described as word-deed alignment or the extent to which what one says is in line with what one does (Kalshoven et al., 2011; Yammarino & Dansereau, 2008). Leaders who keep promises and behave in a consistent manner can be trusted or believed, because they walk the talk or behave as expected (Simons, 2002). Similarly, Yukl (2006) suggests that leaders are ethical when they keep promises and behave accordingly. Thus, ethical leaders keep their promises and act consistently, in a credible and predictable manner, which is known as integrity (Kalshoven et al., 2011).

## **2.5. VARIABLES INFLUENCING ETHICAL CONTEXT AND BEHAVIOUR**

Research has considered a wide range of factors that influence the development of ethical context and behaviour (ethical culture, ethical climate and ethical leadership). Afolabi and Omole (2011) identify individual variables such as personality (ego strength, Machiavellianism, and locus of control) and socialisation (age, gender, educational level, experiences) as dimensions that exert a significant influence on the workforce perceptions, behaviour and attitude. Thus, the socialisation variables are included as moderators in this study.

### **2.5.1 Individual personality**

Expectations associated with personality and background roles can have a significant impact on a person's ethical system – his or her system of ethical philosophies and behavioural patterns. According to Drummond and Bain (1994), researchers have suggested three personality measures that may influence ethical behaviour. These are ego strength, Machiavellianism and locus of control. Stead, Worrel and Stead (1990) define ego strength as an individual's ability to engage in self-directed activity and to manage tense situations. Thus, Machiavellianism is perceived as a measure of deceitfulness and duplicity (Drummond & Bain 1994). Zagenczyk, Restubog, Kiewitz, Kiazad and Tang (2014) hold the view that Machiavellianism is becoming a negative epithet, indicating at least an amoral (i.e. self-interest seeking combined with guile) way of manipulating others to accomplish one's objectives. Locus of control (Boshoff & Van Zyl, 2011) is a measure of whether or not a person believes that his or her outcomes in life are determined by his/her own actions (internal) or by luck, fate or powerful others and institutions (external).

Suphi and Yaratan (2012) argue that locus of control refers to a person's beliefs about control over life events. Individuals who perceive both positive and negative event outcomes as being contingent on their behaviour are considered to be "internals", whereas individuals who perceive their outcomes in life as being determined by forces beyond their control, such as the result of luck, fate or powerful others, are considered to be "externals." Internal individuals assume responsibility for their actions and accept responsibility for the outcomes. External individuals project blame on others or outside events (Bedel, 2012).

Stead, Worrell and Stead (1990) indicate that the philosophies of top managers as well as immediate supervisors represent a critical organisational factor that could influence the

ethical behaviour of employees. Kaptein (2008) also draws attention to the fact that any tolerance of unethical behaviour at the managerial level together with a lack of sanctions makes unethical conducts acceptable (Riivari, Lämsä, Kujala & Heiskanen, 2012). This must therefore be avoided, and rewards must be given for ethical behaviour. Previous studies over a period of more than twenty-five years clearly reveal and support the conclusion that the ethical philosophies of top management have a major impact on the ethical behaviour of employees (Pasdar, Chamanzamin & Sotudeh, 2014; Stead et al., 1990).

Researchers have engaged in debates regarding whether or not individual personality or personality traits are meaningful predictors of leader emergence or effectiveness (Judge, Bono, Illies & Gerhardt, 2002; Zaccaro, 2007). Brown et al. (2005) and Walumbwa and Schaubroeck (2009) assert that personality traits have an influence on and are viewed as plausible antecedents of ethical leadership. Walumbwa and Schaubroeck. (2009) add that personality traits may be uniquely suited to predicting ethical leadership, since ethical behaviour reflects variations in individuals' deep-seated values and beliefs. Thus, ethical leadership should be a behavioural pattern that is consistent across situations and over time. Judge and Bono (2000) report that, among various personality predictors in their meta-analysis, agreeableness was most strongly related to the idealised influence dimension of transformational leadership. Similarly, Brown et al. (2006) found that agreeableness was positively related to ethical leadership. Individuals with a high level of agreeableness are more concerned about proper and humane treatment of people. They are considerate, helpful, honest, decent, trustworthy, understanding, responsive to the needs and wishes of others, and generally likeable (Brown et al., 2005).

### **2.5.2. Socialisation factors**

According to Drummond et al. (1994) as well as Sweeney, Arnold and Pierce (2010), socialisation factors such as age, gender, organisational size, educational level, experience and nationality also seem to influence a person's ethical system. Researchers have identified sex role differences, religious beliefs, age, length of experience and nationality as factors which may influence the ethical decisions made by individuals (Drummond et al., 1994).

### 2.5.2.1. *Gender*

A number of studies have examined the impact of gender on ethical decision-making, with some finding that females have a higher ethical decision-making ability than males (Barnett, Bass & Brown, 1994; Sweeney et al., 2010) and others showing no difference between males and females (Fredricks, Tiley & Pauknerová, 2014). Chen (2014) found that females were more likely to report ethical intentions than males. Peirce and Sweeney (2010) found gender differences to have a significant association with perceived ethical culture. Research has failed to reach a consensus regarding gender differences in the perception of ethical climate (Malloy & Argawal, 2003) although Gilligan (1982) found that females tend to reason from an ethic of caring, whereas males reason from an ethic of justice.

Empirical research regarding gender and leadership is historically typified by a lack of consensus, yielding mixed findings within empirical research (Ferreira & Gyourke, 2014). A study conducted by Dakin (2014) established significant differences in moral development and moral reasoning between males and females. A subsequent study by Brown and Treviño (2006b) found no significant differences in the perception of ethical leadership between both males and females. Balasubramanian and Krishnan (2012) found femininity, masculinity and transformational leadership to be positively related to leaders' ethical behaviour.

The gender variable with regard to the effects ethical context and behaviour (ethical culture, ethical climate and ethical leadership) on job retention and performance will therefore be examined as a moderator variable in this study.

### 2.5.2.2. *Age*

According to Sweeney et al. (2010), mixed findings have been reported on the relationship between age and ethical decision-making. Batman and Valentine (2010) reported that age and ethical decision making were significantly related. Ruegger and King (1992) found that age was positively related to ethical attitudes. In a subsequent study, Barnett, Brown and Bass (1994) established no relationship between age and ethical judgment. Peterson, Rhoads and Vaught (2001) also found that age was a significant predictor of ethical behaviour. They report that older people possess higher ethical beliefs, and are less likely to be influenced by people around them at work and at home. Perryer and Jordan (2002) aptly suggest that this finding appears to be in line with a number of moral development models,

such as that proposed by Kohlberg (1969). Other studies, however, such as that conducted by Douglas, Davidson and Schwartz (2001), discovered no relationship between age and perceived ethical culture.

There is evidence that individuals tend to become more ethical as they grow older (Terpstra, Rozell & Robison, 1993). A better explanation is that as individuals age they tend to become less concerned with wealth and advancement and more interested in personal growth (Hall, 1976). In other words, older workers are likely to appreciate the long-term benefits (organisational performance) of acting in an ethical manner.

As regards to ethics and leadership, Edge (2014) indicate that younger employees are less strict in their ethical judgement than older employees. This implies that as the age of employees increases, they appear to become more conservative in their ethical attitudes. The age variable in terms of the effects of ethical context and behaviour (ethical culture, ethical climate and ethical leadership) on job retention and performance is therefore examined as a moderator variable in this study.

#### *2.5.2.3. Educational level*

According to Pierce et al. (2010), level of education has received attention in the ethics literature. These authors indicate that there is a need to examine whether or not the ethicality of employees varies depending on their educational level. A previous study (Karcher, 1996) which examined this variable did not establish any significant influence of educational level on ethical sensitivity. Loe, Ferrell and Mansfield (2000) conclude that the role of educational level in ethical decision making is less understood. Furthermore, Pierce et al. (2010) state that there is paucity of research that examines the relationship between perceived ethical culture and educational level. Educational level was found to influence an individual's level of ethical or unethical behaviour (Wimbush, et al., 1997). Individuals who are highly educated are more likely to engage in ethical behaviour than their lesser educated counterparts (Treviño, 1986).

The educational level variable in terms of the effects of ethical behaviour of organisations (ethical culture) on work engagement and related constructs is therefore considered as a moderator variable in this study.

#### 2.5.2.4. *Length of work experience*

Length of work experience has also been shown to influence ethical judgement. According to Dubinsky, Jolson, Kotabe and Lim (1991), most researchers examining work experience point out the correlation between work experience and age. Researchers would most likely have to select either age or work experience for inclusion in their statistical model in order to reduce collinearity in the estimation process (Dubinsky et al., 1991). Afolabi and Omole (2011) found a relationship between age, work experience and job satisfaction and ethical behaviour in a sample of police officers. The older and more experienced the individual, the more ethical he or she was.

Sower and Sower (2004) contend that individuals' attitudes towards ethical issues might vary according to their career stage. In early career stages, the individual may be more influenced by situational moderators (e.g. pressure from superiors to meet performance goals) than someone in a later career stage. Weeks, Moore, McKinney and Longenecker (1999) reported that some ethical judgements did differ significantly across career stages. Afolabi et al. (2011) posit that individuals in later career stages display higher ethical judgements than people in earlier career stages. Glover, Bumpus, Sharp and Munchus (2002) also discovered a positive relationship between years of management experience and ethical choice. They argue that greater experience may be linked to greater awareness of what is ethically acceptable as well as a greater experience with regard to dealing with similar situations. The length of experience variable in terms of the effects of ethical context (ethical culture) on job retention and performance factors (work engagement and related constructs) is therefore considered as a moderator variable in this study.

## **2.6. CHAPTER SUMMARY**

Chapter 2 addressed part of the second research aim, namely to theoretically explore ethical context and behaviour, which is conceptualised as consisting of ethical culture, ethical climate and ethical leadership. The description of ethical context and behaviour and relevant variables influencing the ethical context and behaviour were also discussed in this chapter. Therefore, the purpose of the above literature chapter has been achieved.

Chapter 3 discusses the job retention and performance constructs of work engagement, job satisfaction, organisational commitment and OCB from the perspective of positive psychology and humanistic paradigms, with the aim of providing further clarity regarding the second research question.

## **CHAPTER 3 JOB RETENTION AND PERFORMANCE-RELATED FACTORS**

This chapter addresses part of the second literature research aim, namely to theoretically explore job retention and performance, as represented by the constructs of work engagement, job satisfaction, organisational commitment and OCB, and the variables influencing these constructs. It also examines the way in which these constructs are described, conceptualised and explained by theoretical models in the literature. Finally, the variables influencing job retention and performance related factors are discussed.

### **3.1 JOB RETENTION AND PERFORMANCE DESCRIBED**

Job retention and performance are factors that facilitate the retention or resignation of employees and their decisions to leave or remain, depending on their priorities (Van Dyk, Coetzee and Takawira (2014). Retention refers to a situation in which workers choose to stay on and add value to the organisation (Frank, Finnegar & Taylor, 2004; Govaerts, Kyndt, Docky & Baert, 2010). Retention and performance are critical elements of an organisation's more general talent management, which is the implementation of integrated strategies or systems designed to increase workplace productivity by improving processes for attracting, developing, retaining and utilising people with the required skills and aptitude to meet current and future business needs (Hausknecht, Rodda & Howard, 2009).

According to Van Dyk et al. (2012), there are many retention and performance factors that organisations should consider in order to retain employees in the working environment. These include compensation, appreciation for work done well, opportunities for advancement, responsibilities, managerial integrity, good relationships and communication with colleagues within the organisation, job satisfaction, commitment, and engagement (Hausknecht et al., 2009). According to Mendes and Stander (2010), work engagement, satisfaction, commitment and OCB can be utilised as tools to reduce employees' intention to leave, as well as to improve the level of organisational performance. A review of the literature by Bakker and Schaufeli (2008), shows that modern organisations need to place great emphasis on the management of human capital. Positive psychology, as a more modern and effective approach, focuses on human strengths (Luthan, 2010). Positive organisations need to focus on dynamics within the organisation that lead to the development of human strength, and to foster the vitality and flourishing of employees, so that they can perform better in their tasks (Mendes et al., 2010).

Positive organisational behaviour fosters the development of engaged and satisfied employees, and this is the key to ensuring high performance and overall well-being for both the organisation and its workforce, while also increasing the commitment and discretionary behaviour of employees, thereby lowering the risk of poor productivity and loss of talent (Van Dyk et al., 2014).

Yankeelov, Barbee, Sullivan and Antle (2009) conducted a systematic review of the factors that influence retention, and indicate that it is influenced by individual and organisational factors such as educational level, burnout, job satisfaction, co-worker support, supervisor support and quality of supervision. Work engagement, satisfaction and commitment and citizenship behaviour are related to the attitudes, intentions and behaviours of employees (Sacks, 2006), and are viewed as the key factors that can enhance the retention and performance of employees. To gain a better understanding of job retention and performance, the constructs of work engagement, job satisfaction, organisational commitment and OCB will be discussed below.

## **3.2 WORK ENGAGEMENT**

The following section will discuss the conceptualisation of work engagement, Schaufeli, Bakker and Salanova's model of work engagement (2006) as well as Maslach and Leiter's (1997) model.

### **3.2.1 Conceptualisation of work engagement**

The construct of work engagement was developed by Kahn (1990), who related the concept to the notion of psychological presence. According to this statement, engagement refers to the state in which individuals express their entire selves physically, cognitively and emotionally through their work role. When individuals are engaged in their work, they personally express themselves in these ways during role performance. In other words, engaged individuals become physically involved in their tasks, cognitively alert and emotionally connected to others when performing their job (Mitonga-Monga, 2010).

Similar to Kahn's (1990) definition of engagement, Maslach, Schaufeli and Leiter (2001) perceive work engagement as a psychological and emotional state of fulfillment. Hallberg and Schaufeli (2006) expand on this definition by defining engagement as being charged with energy and fully dedicated to one's work. When individuals are absorbed in their work,

time normally flies without them being aware of it (Schaufeli et al., 2006; Tladinyane, Coetzee & Masenge, 2013). Britt (2003) defines the engagement construct as feeling a sense of accountability and commitment to performance. According to Britt (2003), being highly engaged can have both negative and positive consequences. Firstly, on the negative side, individuals who are highly motivated to excel can quickly lose their motivation if they perceive their work to be less meaningful or if they do not think that they can succeed in their jobs due to lack of support or resources. Secondly, on the positive side, when individuals are engaged, they are mentally present with regard to their job, which implies that they are more likely to feel connected to their work and be committed to their role performance (Kahn, 1990; 1992). In the state of mental presence, individuals tend to demonstrate high quality and committed service, which results in high quality outputs (Bhatla, 2011).

Rothbard and Patil (2012) expands on the above definitions and indicates that work engagement is more than just a physical feeling – it has to do with psychological presence and includes two critical components, namely attention and absorption. Attention refers to one's cognitive ability and the amount of time one spends thinking about a role, while absorption means being engrossed in a role and refers to the intensity of one's focus on a role (Mitonga-Monga, 2010). Schaufeli et al. (2006) perceive engagement as an active, positive, fulfilling state of mind characterised by vigour, dedication and absorption. Vigour is characterised by liveliness, dedication by a high level of participation, and absorption by being happy and occupied in one's job. Work engagement represents a positive mental state that encourages flexibility, motivation, pleasure and self-reliance (Rigg, Day & Adler, 2013).

Maslach et al. (2001) note that engagement is characterised by energy, involvement and efficacy – the direct opposites of the three burnout dimensions, namely exhaustion, cynicism and ineffectiveness. Schaufeli and Bakker (2004) also define engagement as the positive antipode of burnout. According to Jose and Mampilly (2012) and Macey and Schneider (2008), work engagement is a desirable condition, has an organisational purpose, and connotes involvement, commitment, passion, enthusiasm, focused effort, and energy, and therefore possesses both attitudinal and behavioural components.

Bakker, Schaufeli, Leiter and Taris (2008) discovered that these various definitions of engagement have considered the construct to be a case of “old wine in a new bottle”. Mitonga-Monga (2010) posits that the concept of engagement is confusing. He proposes that the concept of engagement is an inclusive term for different types of engagement, such as trait engagement, state engagement and behavioural engagement (Macey & Schneider,

2008). Trait engagement consists of personality traits such as positive affect, proactive personality, conscientiousness, extraversion, and the autotelic personality of individuals, which all influence their engagement. State engagement is perceived directly as observable constructs of involvement, satisfaction, commitment and empowerment, energy, dedication and absorption, as sub-constructs of work engagement.

Research on behavioural engagement focuses on OCB, proactive and personal initiative, role expansion and adaptability (Macey & Schneider, 2008). Engaged employees often demonstrate high levels of energy and self-esteem (Rigg et al., 2013). Individuals who are engaged also display ownership and accountability for their work and are excited about their jobs. Engaged individuals are more likely to work harder and persevere, even when faced with difficulties (Soieb, Othman & D'Silva, 2013).

One can hypothesise that when employees are engaged in their work, they will invest their personal resources, such as effort and time (Rigg et al., 2013). In this regard, work engagement becomes more than just an investment of the self, but represents the investment of multiple components that are physical, emotional and cognitive in nature, so that the experience is simultaneous and holistic. Employees who are engaged are perceived to experience a high level of connection to their work on multiple levels (Kahn, 1990; Rigg et al., 2013).

Work engagement is said to be related to but distinct from other constructs in the field of organisational behaviour. Robinson et al. (2004, p.8) indicate that "engagement contains many of the elements of both commitment and OCB, but is by no means a perfect match with either. In addition, neither commitment nor OCB reflect sufficiently two aspects of engagement – its two-way nature, and the extent to which engaged employees are expected to have an element of business awareness." Saks (2006) argues that organisational commitment differs from engagement in that it refers to a person's attitude and attachment towards their organisation. Engagement is not an attitude – it is the degree to which individuals are attentive to and absorbed in the performance of their roles. While OCB involves voluntary and informal behaviours that can help co-workers and the organisation, the focus of engagement is one's formal role performance, rather than extra-role and voluntary behaviour (Sacks, 2006). Work engagement is also related to but different from job satisfaction. Alarcon and Lyons (2011, p.465) indicate that "job satisfaction is different from engagement in two ways". Firstly, job satisfaction can be experienced as an evaluation of emotional state, which results from both what an employee feels or perceives (affect) with

regard to his or her job. Secondly, it refers to what an employee thinks (cognition) about the various aspects of his or her job (Yalabik, Popaitoon, Chowne & Rayton, 2013). The next section concisely explores the different models of work engagement.

### **3.2.2 Schaufeli, Bakker and Salanova's model of work engagement**

Schaufeli et al. (2006) perceive work engagement as a positive, fulfilling and motivational-psychological state of mind characterised by vigour, dedication and absorption. This definition distinguishes work engagement from the related construct of burnout and encompasses both the affective and cognitive aspects of work engagement (Yalabik et al., 2013).

#### *3.2.2.1 Vigour*

Vigour is perceived as a positive affect experienced at work. As a physical element, it is characterised by a high level of energy and mental resilience, and means that one is sufficiently willing to invest effort in one's work, despite adverse situations (Schaufeli et al., 2006). These characteristics of vigour exemplify it as motivational in nature, based on the fact that individuals who are energetic at work are ready to invest their efforts and prosper, despite adverse situations. Mental resilience refers to the individual's ability to prosper or succeed, even when situations are negative. In essence, individuals find their work interesting and allocate time and effort to it, without complaining about their workload. A statement such as "I feel energetic" or "I feel strong and vigorous in my job," is usually associated with a feeling of vigour (Schaufeli et al., 2006).

The concept of vigour originated from the Conservation of Resources Theory (COR) (Hobfoll, 2002). This theory assumes that vigour refers to individuals' energetic resources that are cognitive, emotional and physical in nature. Shirom (2011) indicates that vigour comprises an individual's feelings which comprise physical strength, cognitive liveliness and emotional energy. This definition clearly demonstrates that the vigour construct is a composite of three affective dimensions. Feeling vigorous at work may help individuals to effectively cope with work-related demands, and is also more likely to impact positively on their wellbeing (Yalabik et al., 2013).

According to Nelson and Cooper (2007), vigour is perceived as an antecedent of several variables, such as being more extroverted, having certain task characteristics (such as task

autonomy, significance, feedback, identity and skills variety), having multiple roles, group cohesion and enjoying management support that encourages creativity and deeper thinking among employees. Previous studies have revealed that vigour is a significant predictor of organisational commitment and a promoter of skills learning and pro-social behaviours (Shraga & Shirom, 2009). Shraga et al. (2009) also indicate that vigour represents an affective state that individuals attribute to their work when asked to do so. Vigour is also considered to be an indicator of an individual's level of optimal psychological functioning (Shirom, 2012). Employees who demonstrate a high level of energy (vigour) at work are more likely to cope effectively with work-related demands. In contrast, employees who demonstrate a low level of energy at work are less likely to cope with these (Gabel-Shemueli, Dolan & Ceretti, 2015).

#### 3.2.2.2 *Dedication*

Dedication is characterised by a sense of usefulness, significance, enthusiasm in one's work, feeling passionate and proud of one's job, and being inspired and challenged by work (Schaufeli et al., 2006). It is also characterised by a pleasant state of being wrapped up in one's work, since time passes quickly without a person feeling disengaged from his or her job. This implies that individuals who are dedicated find their work to be important and end up being fully committed to their roles. Dedicated individuals might find it difficult to give up and resign, which may lead them to become satisfied with and committed to their organisations, which in turn leads to a high probability of good performance. Bakker, Schaufeli, Leiter and Taris (2008) indicate that dedicated individuals are most often involved in their work, experience a sense of significance, are enthusiastic, inspired, and proud and challenged. They tend to be satisfied with their working environment, and demonstrate higher levels of commitment, leading to a high probability of retention and performance. Dedicated individuals are satisfied, demonstrate real commitment to their job and the organisation, and are prepared to go the extra mile. They genuinely participate in and contribute to the organisation's performance (Gabel-Shemueli et al., 2015).

#### 3.2.2.3 *Absorption*

Absorption as a cognitive dimension refers to being completely and deeply absorbed in one's work, unable to detach oneself from it, and being unaware of how quickly time passes (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002). This is experienced when an individual likes what he or she is doing as soon as he or she finds the work to be meaningful

and interesting. Absorption has been perceived to be conceptually equivalent to the “flow” construct, which is characterised by an optimal state in which focused attention, a clear mind, union of body and mind, effortless concentration, complete control, loss of self-consciousness, distortion of time and intrinsic enjoyment are experienced (Nakamura & Csikszentmihalyi, 2002; Schaufeli et al., 2002).

#### Note

It is important to note that the concepts of vigour, dedication and absorption play a crucial role in this study, since they focus on individuals’ attitudes and experiences regarding their work, which may help to explain why some individuals are more satisfied, engaged and committed, and perform better in their organisations than others. They also highlight the psychological and behavioural factors that lead not only to a high level of productivity, but also increase the retention of staff.

### **3.2.3 Maslach and Leiter’s model of burnout and work engagement**

Maslach and Leiter’s (1997) model of work engagement is discussed in the burnout literature, which describes engagement as the positive opposite of burnout, indicating that burnout includes the removal of engagement with one’s job (Maslach, Schaufeli & Leiter, 2002). Burnout has been perceived as a syndrome occurring among individuals who work with people to some extent, and who experience crises in their relationship with work, but not necessarily in their relationships at work (Maslach & Leiter, 1997). According to Maslach et al. (2001), burnout as a syndrome consists of three dimensions: feelings of emotional exhaustion, depersonalisation and reduced personal accomplishment.

#### *3.2.3.1 Emotional exhaustion*

Emotional exhaustion refers to the feeling of depletion or draining of emotional and physical resources, being overextended, experiencing distress and a sense of reduced effectiveness, decreased motivation and the development of dysfunctional attitudes and behaviours at work (Bezuidenhout & Cilliers, 2010; Maslach, Jackson & Leiter, 1996). Involvement is minimised in an attempt to protect the self against emotional exhaustion and disappointment (Maslach et al., 1997). Emotional exhaustion is not only physical, but is also experienced psychologically as a loss of feeling and concern, as well as of trust, interest and spirit (Maslach et al., 2001). Of the three dimensions of burnout, emotional exhaustion was found

to be the most predictive when examining organisational phenomena (Rubino, Volpone & Avery, 2013).

### 3.2.3.2 *Depersonalisation*

Depersonalisation refers to an increase in negative, cynical and insensitive attitudes towards colleagues and clients (Rothmann, 2002). Indeed, when individuals feel cynical, they adopt cold, distant attitudes towards work and their colleagues. Involvement or participation is reduced in an attempt to protect the self against exhaustion and disappointment (Maslach et al., 1997). Demerouti et al. (2001) describe depersonalisation as a specific kind of withdrawal or mental distancing that may manifest itself as alienation, disengagement or cynicism. According to Bezuidenhout and Cilliers (2010), this dimension can be perceived as a failure to develop and maintain a professional attitude of detached concern. Maslach et al. (1996) introduced cynicism in place of depersonalisation in their MBI-GS instrument. Cynicism reflects indifference or a distant attitude towards work. It refers to interpersonal behaviour manifesting itself as a negative, callous or excessively detached response to various aspects related to the job (Rothmann, Steyn & Mostert, 2005).

### 3.2.3.3 *Reduced personal accomplishment*

Lack of personal accomplishment refers to feelings of insufficiency, incompetence, lack of achievement and unproductiveness (Maslach et al., 2001). Such a lack means that one evaluates one's work with recipients negatively. It is believed that the objectives are not reached, which is accompanied by feelings of insufficiency and poor professional self-esteem (Benzuidenhout et al., 2010). Lack of personal accomplishment is also described as a feeling of being unable to meet clients' needs and to satisfy essential elements of job performance (Rothmann, 2002). According to this model, six areas of work life lead to burnout and lack of engagement, namely: workload, control, rewards and recognition, community and social support, perceived fairness and work values (Bakker, Hakanen, Xanthopoulou & Demerouti, 2007).

#### Note

Maslach and Leiter (1997) indicate that work engagement is characterised by energy, involvement and efficacy, which are the direct opposites of burnout. These authors aptly comment that when individuals experience the feeling of burnout, energy turns out to be exhaustion, involvement becomes cynicism and efficacy turns into ineffectiveness. A later

study found that job engagement was associated with a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work (Bakker et al., 2007).

From the psychological contract perspective, it has been indicated that when individuals receive resources from their organisation they become satisfied, engaged and feel obligated to be committed, in repayment for the resources that they have received. In both models, namely those of Kahn (1990) and Maslach et al. (2001), research has demonstrated this. In contrast, when the organisation is not providing necessary and sufficient resources, employees will be more likely to disengage themselves, which can negatively affect productivity and lead them to withdraw or even resign from their jobs (Saks, 2006). This is in line with the social exchange and exchange ideology theories.

### **3.3. JOB SATISFACTION**

The following section will discuss the conceptualisation of job satisfaction using Lock's model.

#### **3.3.1. Conceptualisation of job satisfaction**

Job satisfaction is conceptualised from a variety of perspectives. Some authors highlight the feeling or affective component, framed as the employee's feeling or affective response to various aspects of a situation (Smith, Organ & Near, 1998) or a feeling that emanates from the perception that one's job satisfies one's material and psychological needs (Aziri, 2011). According to Barnes, Ghumman and Scott (2013), job satisfaction seems to exclude matters external to one's job because it focuses on the job per- se. It also seems to have a personal, subjective dimension since it involves the likes/ dislikes and intrinsic/ extrinsic needs of the employee (Robertson & Cooper, 2010).

Job satisfaction is perceived as a pleasurable or positive emotional state that arises when individuals appraise their job or job experience (Locke, 1976). This definition implicitly highlights the importance of both affect or feeling and cognition or thinking. Motowildo (1996) defines job satisfaction as the judgment of the favourability of the work environment. In the same vein, Brief (1998, p. 86) defines it as "an internal state which is expressed through affective and/or cognitive evaluations of a job experience with some degree of approval". In addition to its conceptualisation (as an affective state or attitude), the concept may vary according to the target that an individual evaluates (Spector, 1997). Job satisfaction is globally

perceived as an attitude towards the job as a whole. On the other hand, from a facet perspective, this construct is considered to be a constellation of individual attitudes on various aspects of the job (such as relationships with co-workers and supervisors, the job itself, and the organisational conditions and processes (Lee, Magnini & Kim, 2011). In this study, bearing all these conceptualisations in mind, job satisfaction can be viewed as a constellation of individual attitudes on various aspects of his/her job. The next section explores the model relevant to this research.

### **3.3.2 Lock's model of job satisfaction**

Lock described the dimensions of job satisfaction as follows (Swaminath & Jawahar, 2013):

#### *3.3.2.1 Satisfaction with pay*

Satisfaction with pay refers to employees' feelings about their pay, including whether or not it is as much as they deserve, secure and adequate for both normal expenses and luxury items. When employees feel adequately compensated in their organisation for the amount of effort they put into their job, they tend to be satisfied (Ebert & Griffin, 2009).

#### *3.3.2.2 Satisfaction with promotion*

Satisfaction with promotion refers to employees' feelings about the organisation's promotion policies and their execution, including whether or not promotion is frequent, fair and based on ability. Employees are more satisfied when there is a perception of promotion fairness, and when perceived expectations match actual expectations (Evans, Pucik & Bjorkman, 2011).

#### *3.3.2.3 Satisfaction with leadership*

Satisfaction with supervision reflects employees' feelings about their leaders, including whether or not the manager is competent, polite and a good communicator (rather than being lazy, annoying and too distant). Evidence seems to suggest that competent, fair and trusting leaders also enhance employee job satisfaction (Öztürk, 2010).

#### 3.3.2.4 *Satisfaction with co-workers*

Satisfaction with co-workers refers to employees' feelings about their fellow employees, including whether or not co-workers are intelligent, responsible, helpful, fun and interesting, as opposed to being lazy, gossiping, unpleasant and boring. Job satisfaction with colleagues is also enhanced by the existence of positive working relationships with colleagues. When co-workers demonstrate an honest work ethic, it becomes easier for them to get along with each other (Ebert & Griffin, 2009).

#### 3.3.2.5 *Satisfaction with work itself*

Satisfaction with work itself reflects employees' feelings about their actual work tasks, including whether or not those tasks are challenging, interesting, respected and make use of key skills, rather than being dull, repetitive and uncomfortable. When employees, perceive their working conditions in the form of working hours, hygienic working conditions, clear task expectations (Evans, Pucik & Bjorkman, 2011), as positive, a higher level of job satisfaction is experienced. These factors collectively lead to a better working environment, in which perceived fairness and positive working relationships translate into committed, efficient and motivated organisational behaviours (Öztürk, 2010).

Job satisfaction is therefore a favourable positive emotional state which emanates from the appraisal of one's work experience, which is based on the extent to which one's subjective work expectations are being met. Thus, it is not unlikely that job satisfaction could have some influence in terms of retention, productivity, and the display of OCB. Hence there is a growing body of evidence supporting the view that current employment conditions are eating away at the levels of job satisfaction and damaging the physical and mental health of employees (Faragher, Cass & Cooper, 2005).

### **3.4 ORGANISATIONAL COMMITMENT**

The following section will discuss the conceptualisation of organisational commitment and Meyer and Allen's model of organisational commitment.

### **3.4.1 Conceptualisation of organisational commitment**

Organisational commitment refers to the relative strength of an individual's identification with and involvement in a particular organisation (Ezirim, Nwibere & Emecheta, 2012). While this definition is commonly used in the commitment literature, variations of this definition have been used by many academics and practitioners (Allen & Meyer, 1996; Becker, Billing, Eveleth & Gilbert, 1996; Mowday, Porter & Steers, 1979; Price & Muleller, 1986). Meyer, Morini and Vandenberghe (2015) perceive organisational commitment as an involvement in and sense of belonging and emotional attachment to the organisation.

The organisational commitment construct was extended beyond loyalty to the organisation by Price and Muleller (1986), who defined it as an attitude of loyalty and dedication to the organisation. Mowday, Porter and Steers (2013) define organisational commitment as a general term that encompasses an active relationship with the organisation, such that individuals are willing to invest themselves in order to contribute to the organisation's well-being. Academics and scholars alike perceive organisational commitment as a psychological bond with an organisation.

According to Lee and Kim (2010) and Mathieu and Zajac (1990), different forms of commitment depend on their operationalisation. DeCotiis and Summers (1987) divide the organisational commitment construct into two components. The first relates to the internalisation of organisational goals and values, while the second component pertains to actually meeting these goals and values. Meyer, Stanley and Parfyonova (2012) assert that organisational commitment is a psychological state or mind-set that binds an individual to the organisation. Such commitment comprises the strongest emotional component and includes general interests, principles, values and goals (Tsai & Huang, 2008). The next section briefly explores the different models of organisational commitment.

### **3.4.2 Meyer and Allen's organisational commitment model**

Based on all these conceptualisations, the notion of organisational commitment, in this study, is based on Meyer and Allen's (1997) three-component model of organisational commitment, namely affective, continuance and normative commitment.

#### 3.4.2.1 *Affective commitment*

Affective commitment refers to the employee's emotional attachment to, identification with, and involvement in the organisation (based on positive feelings or attitudes towards the organisation). In this case, individuals strongly identify with the goals of the organisation and want to remain there. This is the needed happy state of individuals (Erizim et al., 2012). According to Ezirim, Nwibere and Emecheta (2012), employees who strongly identify with the goals and values of the organisation tend to extend their membership with the organisation. In addition, employees with affective commitment tend to generate benefits for the organisation. Emotional attachment to the organisation (affective commitment) was found to decrease the turnover rate and levels of absenteeism, and is likely to increase extra-role behaviours (Wright & Bonett, 2002).

#### 3.4.2.2 *Continuance commitment*

Continuance commitment refers to commitment based on the cost that the employee associates with leaving the organisation (due to the high cost of leaving). In this case, the individual decides to remain with the organisation because of a perceived loss of sunken costs (Erizim et al., 2012). Continuance commitment develops from a lack of job alternatives and positive work experiences. When an employee realises that he or she has invested a great deal of effort and time in the organisation, he or she will tend to stay with it (Nguyen et al., 2014).

#### 3.4.2.3 *Normative commitment*

Normative commitment refers to the extent to which an individual remains with an organisation because of a sense of obligation. For instance, individuals may feel that they ought to remain with an organisation because they think that it is morally right to continue to participate in the same organisation. An organisation may also invest more resources in training and developing an individual, who then feels obliged to stay with it (Kuo, 2013).

#### Note

Organisational commitment is a key factor which strongly influences the mechanism that connects the employees and the organisation. Organisational commitment also provides cohesion and stimulates employees to devote their effort in order to address external influences and meet customer demands (Kuo, 2013; Zehir, Muceldili & Zehir, 2012). The

organisational commitment construct can be differentiated from exchange-based forms of motivation and target-relevant attitudes. According to Madsen, Miller and John (2005), organisational commitment influences employees' behaviour and attitudes, even in the absence of extrinsic motivation. Employees who experience feelings of accomplishment and self-fulfilment tend to be psychologically and emotionally committed to the organisation (Hansen, Alge, Brown & Jackson, 2013).

One could hypothesise that, based on SET, when employees and employers abide by the exchange rules, more positive, trusting and loyal relationships and mutual commitments may result. Individuals who continue to engage themselves do so because of the continuation of favourable reciprocal exchanges. As a result, individuals who experience work engagement are more likely to be in more trusting and high-quality relationships with their employer and will, therefore, be more likely to report more positive attitudes and intentions toward the organisation (Sacks, 2006).

### **3.5 OCB**

The following section will discuss the conceptualisation of organisational citizenship behaviour (OCB) and Organ's model of OCB.

#### **3.5.1 Conceptualisation of OCB**

OCB is defined as an individual's behaviour that goes beyond formal job requirements, where individuals can decide whether they want to perform OCB and to what degree (Organ, 1988; Rurkkhum, 2010). Solomon and Sridevi (2010) perceive OCB as behaviour observed within the work context that demonstrates itself through taking initiatives, proactively seeking opportunities to contribute one's best, and going the extra mile, beyond one's employment contract. Cohen and Vigoda (2000) concur with this sentiment and propose further benefits of OCB as providing enhanced efficiency in resource utilisation and allocation, reduction in managerial expenses, improved co-ordination of organisational activities, improved organisational status as an employer of choice, enhanced capacity of dealing with internal and external influences. Employees who engage in these discretionary behaviours are prepared to "go beyond the call of duty", have a positive attitude towards the organisation, and are prepared to defend the organisation against critique.

Furthermore, OCB contributes indirectly to the organisation through the maintenance of the organisation's social system, which supports task performance (Babcock-Roberson & Strickland, 2010). Since its inception, OCB has attracted the attention of scholars. Many empirical studies have been conducted (LePine, Erez & Jackson, 2002). However, the taxonomy of OCB throughout the years has not provided complete consistency. According to Babcock-Roberson et al. (2010), OCB includes constructs such as prosocial organisational behaviour, contextual performance, organisational spontaneity, and extra-role behaviour. In addition to overlapping labels, scholars have been inconsistent with regard to the behavioural dimensions that make up OCB (Babcock-Roberson, 2010).

The Social Exchange Theory (SET: Blau, 1964) was the major theory used to explain OCB (Nielsen, Bachrach, Sundstrom & Halfhill, 2012). In this study, a distinction is made between social and economic exchange. These theories are perceived to be important when explaining the exchange relationship between an employee and this organisation, which is assumed to take place based on reciprocity considerations (Coyle-Shapiro, 2002). Organ, Podsakoff and Mackenzie (2006) asserted that the decision to engage in extra-role behaviour is a function of whether one perceives having been treated fairly and respectfully by the organisation, therefore defining one's relationship with the employer as one of social exchange. Since OCB is a discretionary behaviour and therefore under the personal control of the employee, individuals may choose to engage in extra-role behaviour because of their willingness to reciprocate the perceived organisational support for providing opportunities in the achievement of goals (Organ et al., 2006). The next section concisely discussed the different models of OCB.

### **3.5.2 Organ's model of OCB**

A great many researchers suggested that OCB is constituted by five dimensions, namely altruism, conscientiousness, sportsmanship, courtesy, and civic virtue (Costa & Mac Crae, 1992; Organ, 1988; Podsakoff, MacKenzi, Moorman & Fetter, 1990).

#### *3.5.2.1 Altruism OCB dimension*

Altruism OCB refers to the extent to which employees assist co-workers who have heavy workloads, helping them with personal matters, and showing new employees the ropes when they first start working in the organisation (Colquit, Lepine & Wesson, 2013). When

employees engage in this behaviour, it is likely that they will show a higher level of empathy and help their colleagues to resolve problems encountered in the workplace (Organ, 1998).

### 3.5.2.2 *Conscientiousness OCB dimension*

Conscientiousness OCB refers to behaviours that go well beyond the minimum required level. For example, the conscientious employee uses the organisational resources optimally by executing his or her tasks in a diligent manner (Öztürk, 2010). When individuals engage in these types of voluntary activities, it is likely that organisational efficiency will be enhanced and its processes will run smoothly (Organ, 1998).

### 3.5.2.3 *Courtesy OCB dimension*

Courtesy OCB refers to behaviour that avoids potential problems with others and adopts pre-emptive measures to ensure that the rights of others are not violated. This behaviour includes aspects such as being respectful towards one's colleagues, liaising with colleagues who might be impacted by one's decisions, and sending a reminder to co-workers to ensure compliance (Öztürk, 2010). Employees who perceive that their rights have not been violated in their working environment are likely to be committed to the organisation and trust their colleagues.

### 3.5.2.4 *Sportsmanship OCB dimension*

Sportsmanship OCB refers to behaviour that involves having a good attitude towards one's co-workers, even when they have done something annoying or when the unit is going through a tough time (Nielsen et al., 2012). Individuals who display sportsmanship are likely to enhance the morale of the group and subsequently reduce their turnover intention (Lo & Ramayh, 2009).

### 3.5.2.5 *Civic virtue OCB dimension*

Civic virtue OCB refers to participating in the organisation's operations at a deeper-than-normal level, by voluntarily attending meetings and functions, and reading and keeping up with organisational announcements (Colquit et al., 2013). These behaviours reflect employees' acknowledgement of being part of the organisation and accepting the responsibilities which this entails (Lo et al., 2009). Researchers have indicated that

individuals who engage in civic virtue behaviours are likely to perform better in their tasks (Walz, 2000).

### **3.6 VARIABLES INFLUENCING JOB RETENTION AND PERFORMANCE**

There are a variety of factors that impact the job retention and performance-related factors such as individual personality and socialisation factors (age, gender, educational level and job tenure), which have often been linked to work engagement (Barkhuizen & Rothmann, 2006; Bezuidenhout & Cilliers, 2010; Burke & El-Kot, 2010; Schaufeli, Bakker & Salanova, 2006), job satisfaction (Mabekoje, 2009), organisational commitment (Bakan, Büyükeşe, & Erşaham, 2011) and OCB (Swaminathan & Jawahar, 2013).

#### **3.6.1 Individual personality**

Research has suggested that personality may influence the job retention and performance factors of work engagement (Zaidi, Wajid, Zaidi, Zaidi, & Zaidi, 2012), job satisfaction (Cumgoz & Karapinar, 2011), organisational commitment (Panaco & Vandenberghe, 2012) and OCB (Bambale, Shamsudin & Subramaniam, 2011; Elanain, 2007). The Big Five model of personality is most widely used in psychology (Zaidi et al., 2012). According to Akhtar, Boustani, Tsivrikos and Chamorro-Premuzic (2015), few studies have examined the relationship between engagement and all five dimensions of personality: extraversion, agreeableness, conscientiousness, neuroticism and openness. Mostert and Rothmann (2006) investigated the relationship between all five traits and engagement. Extraversion was found to be a strong predictor of positive well-being (Zaidi et al., 2012) and neuroticism of negative well-being (Keyes, Shimotkin, & Ryff, 2002); implying that compared to neurotic individuals, extraverted individuals are more likely to experience high levels of engagement (Brief & Weiss, 2002).

According to Cumgoz et al. (2011), personality affects employees' job satisfaction. A study by Furnham, Petrides, Jackson and Cotter (2002) established that employees with high neuroticism scores were less satisfied with the amount of work, their co-workers, pay and supervision. In contrast, those with high extraversion scores were satisfied. The results of the meta-analysis study by Judge, Heller and Mount (2002) indicate that employees' personalities, specifically emotional stability, conscientiousness and extraversion, are important in understanding job satisfaction.

Pannacio and Vandenberghe (2012) found that the big five personality traits influence how people self-regulate their emotional experiences and select themselves into situations that reflect their emotional state. This implies that a big five personality may influence one's level of commitment. In a subsequent study Bambale et al. (2011) reported that extraversion and agreeableness attributes predicted both the roles prescribed and extra-role behaviour while conscientiousness predicted in-role performance behaviour. This implies that individuals who are cooperative, helpful, and courteous are likely to engage in extra-role behaviour.

### **3.6.2 Socialisation factors**

The following section will discuss the socialisation factors of age, gender, educational leave and tenure.

#### *3.6.2.1 Age*

Researchers have identified age as a factor that may influence individual levels of engagement, satisfaction, commitment and citizenship behaviour (Swaminathan & Jawahar, 2013). Schaufeli et al. (2006) indicate that work engagement tends to be slightly higher among older workers, but these relationships are weak. However, no significant differences were found in the work engagement of employees of different age groups (Mitonga-Monga, 2010).

Kardam and Rangnekar (2012) indicate that older employees are more satisfied and committed to their job than younger ones. This implies that older employees tend to be satisfied and develop an emotional bond with their employer than younger ones. In a subsequent study (Singh & Singh, 2010) found that older employees tend to display more discretionary behaviour than younger employees. Older employees were previously found to have more positive psychological senses of community and to be less competitively oriented compared to younger employees (Singh & Singh, 2010).

#### *3.6.2.2 Gender*

Regarding the gender variable, Schaufeli and Bakker (2003) indicate that men seem to be more engaged than women. Schaufeli and Bakker (2003) reported that men scored significantly higher than women, both overall and in specific dimensions of engagement (vigour, dedication and absorption). In a subsequent study conducted among managers and

professionals in Egypt, Burke and Al-Kot (2010) found that men and single employees reported higher levels of work engagement. Ariani (2014) reported no significant gender differences in the mean scores in service industries in Yogyakarta.

### 3.6.2.3 *Job and educational level*

Individuals with different qualifications differ in relation to their level of engagement (Mitonga-Monga, 2010). Barkhuizen and Rothmann (2006) indicate that individuals with different qualifications differ in relation to their level of absorption. These authors found that individuals in possession of doctoral degrees are more absorbed in their jobs than those with a four-year or Honours degree. This supports the findings of the study by Gilbert (2001), who indicates that highly qualified employees tend to be satisfied, more absorbed in their work, so that it becomes more psychologically central, thus making it difficult for them to detach from their tasks.

### 3.6.2.4 *Job tenure*

With regard to the job tenure variable, Avery, McKay and Wilson (2007) suggest that workers who have been in their job longer are more likely to have reached a plateau, and thus may report a lower level of engagement than those with less positional tenure. This is due to the fact that the latter employees tend to follow more specific exchange norms in building their relationship with the organisation than tenured employees (Bal, Cooman & Mol, 2013). Similar effects could occur for organisational tenure and tenure with one's manager (Avey et al., 2007). Evidence suggests that individuals in larger organisations tend to be absent more often, which could be indicative of less engagement. Koyuncu, Burke and Fiksenbaum (2006) reported no significant relationship between individual level of work engagement and job tenure. Mohapatra and Sharma (2010) indicate that job tenure is perceived to be a good predictor of work engagement. In this study, the demographical variables of age, gender, educational level and job tenure will therefore be examined as moderator variables.

Research evidence suggested that a person who stays in an organisation for a long period of time is likely to become emotionally attached to it (Riordan, Griffith, & Weatherly, 2003).

### **3.7 CHAPTER SUMMARY**

Chapter 3 addressed part of the second research aim, namely to theoretically explore job retention and performance, which is conceptualised as consisting of work engagement, job satisfaction, organisational commitment and OCB. The description of the job retention and performance factors and the relevant variables influencing the job retention and performance factors were discussed in this chapter.

Therefore, the second goal of the literature review was achieved.

Chapter 4 discusses the theoretical relationship between ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership), job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) and biographical characteristics in more detail.

## **CHAPTER 4 THEORETICAL RELATIONSHIP BETWEEN ETHICAL CONTEXT AND BEHAVIOUR, JOB RETENTION/ PERFORMANCE AND BIOGRAPHICAL CHARACTERISTICS**

Chapter 4 addresses part of the third research aim, namely to theoretically explore the relationship between ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership), job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) and biographical characteristics. This will enable the researcher to propose the hypothesised relationship between these constructs.

### **4.1 ETHICAL CULTURE AND JOB RETENTION/ PERFORMANCE**

Research on ethical culture has been conducted in various contexts, including the workplace environment. Most researchers have come to the conclusion that the construct of ethical culture is sometimes referred to as corporate ethical culture or ethical organisational culture. The construct is said to be associated with job retention and performance consisting of work engagement, job satisfaction, organisational commitment and OCB (Ethics Resource Center, 2010; Kaptein, 2011b; Chye Koh & Boo, 2004; Treviño, 1990; Treviño et al, 1998; Young, 2012).

#### **4.1.1 Ethical culture and work engagement**

There is little research on the extent to which ethical culture relates to employee behaviour and attitudes (Kaptein, 2011). Young (2012) recently conducted a study on organisational culture, ethical workplace climate, and work engagement, and found that culture type had an overall positive impact on employees' level of work engagement. Another study conducted by the Ethics Resource Center (2010) indicated that a positive perception of an organisation's ethical culture is associated with a higher level of work engagement. Furthermore, management's commitment to ethics is particularly crucial for work engagement. Treviño, Den Nieuwenboer and Kish-Gelphart (2014) posit that ethical culture is the extent to which an organisation's ethical standards are established and promoted by its management, employees, policies, processes and decision-making. Basically, this means that an ethical culture teaches workers how things should be done. Practically, the more employees see others being held accountable for ethical actions and acting with integrity, the stronger the ethical culture of the organisation will be.

A study conducted by the Ethics Resource Center Survey in 2010 also showed that a strong score on the ethical culture indices is linked to higher engagement scores. The actions of the top management are especially powerful. The strongest relationship between employees' level of work engagement and ethical culture involves the top management and supervisor's ethical philosophies or culture indices, which measure employee perceptions of each group's commitment to open communication, positive ethical role modelling and accountability. Practically, employees who perceive their organisation to be ethical were shown to demonstrate high levels of energy in their work, be proactive and show initiative, take responsibility, with the aim of developing themselves professionally, align their behaviour with the code of conduct, be satisfied, and be committed to high quality performance standards. Employees who perceive their work environment to have positive ethical standards and practices are more likely to be attached and committed. In other words, employees who perceive their organisation to positively promote or encourage ethical conduct are more likely to be emotionally, cognitively and physically invested in their job (Huhtala, Feldt, Lämsä, Muano & Kinnunen, 2011).

Huhtala et al. (2011) investigated the relationship between the organisational ethical culture and occupational well-being among 902 managers from different organisations, and found that the managers' perceptions of the ethical culture prevailing in their organisations were associated with their occupational well-being, both directly (high level of work engagement) and indirectly via a low level of ethical strain (low level of emotional exhaustion). These findings indicate that the ethical culture of organisations plays a crucial role in both managers and employees' occupational well-being (Huhtala et al., 2011). Therefore, it is hypothesised in this study that ethical culture related positively to employees' levels of work engagement in the DRC organisational context.

#### **4.1.2 Ethical culture and job satisfaction**

To date, there is little research supporting the link between ethical culture and job satisfaction (Chye Koh & Boo, 2004; Kwantes, Karan, Kuo & Towson, 2008; Treviño et al., 1998). Research conducted by Chye Koh et al. (2004) indicates that ethical culture was positively associated with job satisfaction and commitment variables. According to Kwantes et al. (2008), ethical culture is positively related not only with job performance, but also with employees' job satisfaction. It is obvious that ethical culture is intended to guide and influence employees' behaviours both formally and informally. In their study, Chye Koh et al. (2001) found that the measures of organisational ethics, namely top management support

for ethical behaviour and career success, are associated with job satisfaction. A positive association was found between employees' personal belief in a work ethic and organisational commitment (Parboteeah, Paik & Cullen, 2009; Seyadin, Zaboli, Malmoon & Azami, 2013).

Fu and Deshpande (2012) conducted a study on the relationship between ethical behaviour, job satisfaction and organisational commitment, and found that greater job satisfaction is expected to lead to stronger organisational commitment. This is consistent with Porter, Steers, Mowday and Boulian's (1974) findings, which suggested that organisational commitment is much less specific and more stable than job satisfaction, and that the latter is expected to influence the former. Job satisfaction being the perception and emotional response of an individual towards his or her work, it becomes evident that, when employees perceive that they have been satisfied by internal and external aspects of their job they will be more likely to be emotionally connected with or remain for a long time with the organisation, and also increase their performance. Past research has shown that job satisfaction is a determinant of organisational commitment (MacKenzie, Podsakoff & Ahearne, 1998). The advocates of ethics also support this association (Saks, Mudrack & Ashforth, 1996; Treviño et al, 1998). It is therefore expected in this study that ethical culture will be positively associate with job satisfaction in the D.R.C organisational context.

#### **4.1.3 Ethical culture and organisational commitment**

Previous studies also reveal that ethical culture is related to organisational commitment (Treviño et al., 1998). Valentine, Godkin and Lucero (2002) found different cultural aspects of an ethical context to be positively related to both organisational commitment and person-organisation fit. This is consistent with Obalola, Aduloju and Olowokudejo's (2012) findings, which suggest that when leaders create a corporate culture that emphasises high ethical values, employees' commitment to the organisation will increase. This implies that if the ethical culture of an organisation is perceived as being more supportive of ethical values, individuals' behaviour will be more ethical and more strongly connected to the organisation (Valentine et al., 2002). In subsequent studies, Vitell and Ramos (2006) found significant differences in corporate values to be associated with organisational commitment. Similarly, Momeni, Marjani and Saadat (2012) reported organisational culture to be positively related with organisational commitment.

This finding is in line with Bergman's (2006), who argues that organisations with cultures which emphasise strong norms for obligation are likely to create high levels of normative commitment. The same author also suggests that organisations with cultures which have strong norms for internalisation and identification are likely to generate high levels of affective commitment. The association of organisational culture and organisational commitment was also supported by Mathew & Ogbonna (2009) and Ezirim, Nwibere and Emecheta (2012). An employee who perceives her or his organisation to exhibit a positive strong ethical culture will be more likely to be emotionally, affectively and cognitively connected to, or intend to stay with, the organisation. It is therefore, hypothesised in this study that ethical culture is positively associated with the organisational commitment in the D.R.C organisational context.

#### **4.1.4 Ethical culture and OCB**

The positive relationship between ethical culture and both in-role and extra-role behaviour has been well documented (Ruiz-Palomino & Martinez-Cañas & Frontrodona, 2013). The potential interest of the ethical culture is that it offers a basis for expecting relationships not only with ethical decision making but also with other forms of positive employee response such as OCB, which is perceived as an individual behaviour that is discretionary, not directly or explicitly recognised by the formal job descriptions, but serves to fertilise the social-psychological work context in ways that facilitate task performance and overall organisational well-being. Thus, ethical culture is identified as one of the important factors that may help to predict employee's willingness to extend extra effort. Studies by Kwantes, Karan Kuo and Towson (2008) found that social belief predicted both OCB dimensions of in-role and extra-role behaviours. Another study conducted on the relationship between personal ethics and OCB indicated that more ethical individuals were perceived to be more productive than less ethical employees (Turnipseed & Wilson, 2009).

As outcome variables, Saks (2006) suggested that work engagement is positively related to extra in-role behaviours such as discretionary effort and has a negative relationship with intention to leave. Furthermore, an examination of the relationship between organisational commitment and OCB indicates that affective commitment is associated with voluntary involvement and personal industry. In addition, continuance commitments are positively related to generalised compliance but simultaneously negatively associated with voluntary involvement (Wang, Lee & Ho, 2012). An employee who perceives the work environment as fostering a favourable and positive ethical culture and whose values are congruent with the

organisational values will be more likely to respond in a positive way by achieving his/her job goals beyond the requirements of the contract. These findings are in line with the study conducted by Chun, Shin, Choi & Kim (2013). Therefore, it is hypothesised in this study that ethical culture constructs are related with OCB in the D.R.C organisational context.

#### **4.1.5 Ethical culture and moderator variables**

Research on demographic characteristics with regard to ethical culture has shown that age, gender, educational level, length of experience and a firm's size are related to ethical culture, while a study conducted by Peterson, Rhoads and Vaught (2001) indicates that the age variable was a significant predictor of ethical behaviour. They report that older individuals possess higher ethical beliefs and are less likely to be influenced by individuals around them at work and home. This finding is intuitively appealing, and is in line with a number of moral development models, such as that proposed by Kohlberg (1969).

Empirical studies into ethical differences between men and women have produced divergent findings. Some researchers (Kracher, Chatterjee & Lundquist, 2002; Peterson et al., 2001) have found significant differences in ethical attitudes. Betz, O'Connell and Shepard (1989) conducted a study on gender differences among business school students, focusing on work-related values and willingness to engage in unethical behaviour. They found that men were more than twice as likely to engage in unethical behaviour. Most studies identified gender differences in ethical attitudes, finding women to be more ethical than men. Furthermore, Peterson et al. (2001) found that gender and age were predictors of ethical beliefs. However, research on ethical culture and job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) in the context of DRC has not yet been empirically conducted. Therefore, this study suggests that gender, age, educational level and length of service will moderate the relationship between ethical climate and job retention and performance constructs.

#### **4.2 ETHICAL CLIMATE AND JOB RETENTION/PERFORMANCE**

Research on ethical climate has been carried out in various organisations, such as public and private sectors, as well as non-profit and for-profit organisations. Most researchers have come to the conclusion that the construct of ethical climate is sometimes referred to as corporate ethical climate or organisational climate (Holloway, 2012; Victor & Cullen, 1987; 1988). The construct is said to be associated positively with the job retention and

performance conceptualised as work engagement, job satisfaction, organisational commitment and OCB (Ahmed, Shad, Mumtaz & Tanvee, 2012; Chye Koh & Boo, 2004; Huang, You & Tsai, 2012; Martin & Cullen, 2006; Treviño 1990; Schwepker, 2001; Treviño et al 1998).

#### **4.2.1 Ethical climate and work engagement**

There is evidence on the extent to which ethical climate relates to work engagement (Zehir, Müceldili, & Zehir, 2012). Müjdelen, Yaldiran and Ergun (2012) conducted a study on the effect of the former on the latter, and found that ethical climate had a positive impact on employees' work engagement. A subsequent study conducted by Mohr, Young and Burgerss (2012) indicated that organisational culture and ethical workplace climate were positively related to work engagement and negatively related to intention to leave. This means that the higher and more positive the employees' perceptions of ethical climate are, the higher the levels of his/her work engagement and the lower will be his or her intention to leave the organisation. Employee perceptions of a social climate type were associated with positive and higher levels of work engagement and low levels of intention to quit (Mohr et al, 2012). Rizivi, Javed and Siddiqui's (2012) study on organisational climate and engagement found that the climate of an organisation influences its value system. Ethical climate therefore becomes a significant key factor that shapes the behaviour and attitudes of employees (Martin & Cullen, 2006).

Organisations that maintain a positive ethical climate can influence individuals' level of performance, as well as cohesion and moral identity, which subsequently affect group outcomes. It is evident that ethical climate gives employees a moral identity. Rizivi et al. (2012) suggest that organisations grow with employees – if employees are developing themselves, the organisation will automatically develop and grow. It is therefore essential to provide employees with an ethical work environment that enhances and stimulates the level of engagement, creativity and innovation among individuals, thereby establishing an organisational culture.

Practically, if employees perceive their typical organisational practices and procedures, authority, ethical codes, policies and rewards and punishment to have ethical content, they will be more likely to be physically, emotional and cognitively connected in their jobs. Yener, Yaldiran and Ergun (2012) indicate when code of conduct and rules are effectively communicated and understood by employees they are likely to result in greater attitudes and

ethical behaviour. This greater scope of ethical behaviour may depend on implementing and enforcing the code of ethics and policies as well as rewarding ethical behaviours and punishing unethical ones (Yener et al., 2012). Ethical climate was found to have a strong positive and significant relationship with dedication and absorption and its relationship with vigour (Yener, et al, 2012).

Psychological climate as a way in which organisational environments are perceived and interpreted by employees, was found to be related with employee involvement and overall work performance (Brown & Leigh, 1996). It is suggested that psychological climate provides opportunities for behaviour and attitudes in workplace environments, as well as placing constraints upon them (Parker, Baltes, Young, Huff, Altmann, Lacost & Roberts, 2003). According to Tudor, Pelton and Strutton (2015), psychological climate is a lens that employees use to understand their environment and capture meaningful psychological representations made by individuals relative to the structures, processes and events that occur within the organisation. Psychological climate is related to how employees involve themselves in their work, which ultimately affects productivity. Shuck and Reio (2014) found that psychological climate was related to work engagement and intention to leave. It is therefore hypothesised in this study that ethical climate will be positively and significantly related to work engagement in the DRC context.

#### **4.2.2. Ethical climate and job satisfaction**

To date there is little research supporting the link between ethical climate type and job satisfaction (Elçi & Alpan, 2009; Chye Koh & Boo, 2004; Tsai & Huang, 2008). Job satisfaction has been defined as the pleasurable emotional state resulting from the appraisal of one's job values (Locke, 1969). According to Huang et al (2012) satisfaction may be both intrinsic, derived from internally mediated rewards such as the job itself and opportunity for personal growth, and extrinsic, resulting from externally mediated rewards such as pay, company policies and support, supervisor and co-worker and chance for promotion. Based on the above mentioned discussions it appears that ethical climate will influence one's job satisfaction. Various studies from different occupational work settings reveal that employees' job satisfaction is related to aspects of company's organisational climate (i.e. policies and supervisory). These aspects may help substantially eliminate ambiguity on the job related to handling ethical situations. As a result, a higher level of employee satisfaction may occur because the climate eliminates ambiguities (Huang et al, 2012).

Research conducted on the impact of ethical climate types on facets of job satisfaction reveals that among various facets, respondents were most satisfied with their work and least satisfied with their pay (Deshpande, 1996). The same study found that none of the climate types significantly influenced satisfaction with pay. Professional climate significantly influenced satisfaction with promotion, supervisors and work, as well as significantly influencing overall job satisfaction. Deshpande (1996) also reports that respondents who believed that their organisation had a caring climate were more satisfied with their leaders. On the other hand, an instrumental climate had a significantly negative influence on overall job satisfaction and satisfaction with promotion, co-workers and leaders.

Elçi and Alpkın's (2009) study on the influence of ethical climate factors on employee work satisfaction found that the self-interest type negatively influenced work satisfaction. However, team interest, social responsibility, law and professional codes were found to have a positive impact on work satisfaction. It is evident that different types of ethical climate are related to facets of job satisfaction. Tsai and Huang (2008) found that the climate types of caring, independent and rules were positively related to job satisfaction whereas the instrumental climate type was negatively related to the satisfaction construct. Chye Koh and Boo (2004) indicate that when employees perceive their organisation to have put in place good norms, values, policies and procedures they will be more likely to be satisfied with the various aspects of their jobs. This links with Martin and Cullen's (2006) meta-analytic review of the continuities and extensions of ethical climate theory, which reports that employees' satisfaction with their jobs, promotion, co-workers and leadership were frequently associated with ethical climate. Furthermore, a perceived caring climate was believed to promote job satisfaction, as well as a perceived principled climate, such as independent, law and code, and rules climates (Martin et al., 2006). In this study, it is hypothesised that ethical climate will be related to employees' job satisfaction in the DRC context.

#### **4.2.3 Ethical climate and organisational commitment**

Previous researches have investigated the ethical climate in relation to organisational commitment (Cullen, Parboteeah & Victor, 2003; Schwepker, 2001; Tsai & Huang, 2008; Vitell & Singhapakdi, 2008). Moore and Moore (2014) indicate that higher levels of organisational commitment are associated with the perceptions of a caring climate. Cooperation, mutual personal attraction and positive feelings towards their jobs are group characteristics that are consistent with perceptions of a caring climate by organisational members. Ethical climate types have been shown to influence the level of commitment within organisations (Valentine, Godkin & Lucero, 2002).

Positive perception of ethical climates fosters the commitment of individuals to the organisation. When an organisation is guided in terms of its goals and values, this assists in establishing a positive work environment (Martin et al., 2006). Researchers usually hypothesise higher levels of organisational commitment when employees perceive a stronger caring climate. Organisational commitment is perceived as the level of dedication and loyalty that individuals have towards the organisation. If the level of commitment is high, the organisational members will be motivated, the level of productivity will increase, and the goals of the organisation will be reached more effectively. Conversely, a negative relationship is typically expected between perceived instrumental climates and organisational commitment. In other words employees, who perceive their work environment to exhibit an instrumental climate, are less likely to be affectively attached to the organisation.

Johnston and Spinks (2013) indicate that ethical climate impacts not only the attitudes and behaviour of an organisation's employees but also decreases turnover intentions. Cullen, Victor and Bronson (1993) argue that employees prefer certain types of normative climates, such as principled or benevolent, rather than egoistic-based climates. Employees may feel more attached to and identified more with the values of the organisations that feel responsible for others and encourage concern for employees and the community (Treviño et al., 1998). In this study, it is hypothesised that ethical climate will be related to the employee's level of organisational commitment in the DRC context.

#### **4.2.4 Ethical climate and OCB**

Research has shown that there is a positive relationship between ethical climate and OCB (Huang, You & Tsai, 2012; Leung, 2008; Baker, Hunt & Andrew, 2006; Shin, 2011). Evidence indicates that the formation of a strong organisational ethical climate is essential to prevent unethical behaviour (Ahmed & Machold, 2004) and enhance the performance of organisations (Lu & Lin, 2014). Barnett and Schubert, (2002) posit that this may be due to the fact that the ethical climate within an organisation is an important factor affecting employees' perceptions about the nature of the relational contract between them and their employer. Such a relationship is a psychological contract between employer and employee (Engelbrecht & Chamberlain, 2005) and a mutual covenant to the welfare of both parties – it is a shared set of values (Leung, 2008). Individuals who feel bound to the organisation and perceive that the organisation performs and encourages ethical action are more likely to reciprocate their goodwill in the form of discretionary effort behaviour (Organ, 1988).

According to Cardona, Lawrence and Bentler (2004), SET suggests that citizenship behaviour can be expected when an employee experiences positive benefits from an organisation and is motivated to reciprocate these positive feelings towards the organisation. Numerous studies have linked ethical climate types to OCB. Huang et al. (2012) found that organisations can increase OCBs by influencing an organisation's ethical climate. This finding suggests that managers can foster, within organisations, the climate types of caring, law and code and rules, which increase OCB. Leung's (2008) study on the matching of ethical climate to in-role and extra-role behaviours in a collectivist work setting found that lower levels of ethical climate (instrumentality and independence), characterising a weak relational contract between employer and employee, are negatively associated with extra-role behaviour. On the other hand, higher levels of ethical climate (caring and law and code), symbolic of a strong relational contract at work, are positively associated with in-role behaviour.

A study by Shin (2012) found that the ethical climate is related to collective OCB. He also found that this relationship was moderated by climate strength. Furthermore, the relationships between ethical climate and interpersonally directed collective OCB and between ethical climate and organisationally directed collective OCB were more pronounced when climate strength was high than when it was low. Moore et al.'s (2014) study on work values and OCB found a positive and significant relationship between OCB and the hard work and independence components of the Protestant Work Ethic construct. In this study, it is hypothesised that ethical climate will be related to employees' level of OCB in the DRC context.

#### **4.2.5 Ethical climate and moderator variables**

Research on the demographic characteristics with regard to ethical climate has revealed that age, gender, educational level, job tenure and organisational size are related to ethical climate. Studies conducted by Wimbush, Shepard and Markham (1997) and Lund (2008) indicate that gender has been more frequently reported in business ethics empirical investigations than any other demographic variable. Although much research (e.g. Atakan, Burnoz & Topcu, 2008; Gilligan, 1982; Jone & Gautschi, 1988; Peterson et al, 2001; Stedham, Yamamura & Beekun, 2007) focusing on gender differences in making ethical decisions has reported mixed results, research has revealed that females are more ethical than males (Oumlil & Balloum, 2009). These findings are in line with Gilligan's (1982) study, which suggests that perspectives of men and women regarding ethical issues are generally

attributed to early socialisation. Moreover, it proposes that women and men bring different sets of values to the workplace. Since men are concerned with achieving success, they are more likely to break rules and laws, and therefore to engage in unethical behaviour. Women, on the other hand, are more concerned with performing their tasks well and maintaining harmony in the workplace, are less likely to break rules and laws, and are consequently less likely to be involved in unethical behaviour (Gill, 2010).

Research on adult moral development has found that some adults continue their cognitive moral development beyond formal schooling (Wimbush et al., 1997). According to Treviño (1986), if years of work experience can play a significant role in continuing adult moral development, then age as a surrogate would be expected to be positively related to ethical climate and ethical behaviour. Highly educated individuals have been found to be very unethical in their business practices. However, Kim and Miller (2008) found that people with such backgrounds tend to be more utilitarian and have a more cynical view of the ethical climate. The dimensions of ethical climate were found to increase with tenure (Victor & Cullen, 1988). In a subsequent study, Malloy and Argarwal (2003) claimed that a whole range of factors (gender, age, moral educational level, organisational factors, ethical codes, company policy, and level of moral development) have been found to affect ethical climate. However, research on ethical climate and job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) has not yet been conducted in the DRC's context. Therefore, this study suggests that gender, age, educational level and length of service will moderate the relationship between ethical climate and job retention and performance constructs.

#### **4.3 ETHICAL LEADERSHIP AND JOB RETENTION/PERFORMANCE**

Research on ethical leadership in organisations reveals that leadership phenomenon is increasingly portrayed as a crucial element of sustained success in today's business world, and recent scandals demonstrate that a lapse in ethics at the top can be costly for an organisation (Den Hoogh & Den Hartog, 2009a). Attention has been paid to the role of control systems, as well as the impact of formal organisational ethics programmes and the essential role of leaders' support for such programmes (Weber, 2010). Ethical leadership was found to be positively related to considerate behaviour, honesty, trust in the leader, interactional fairness, and socialised charismatic leadership (Balasubramanian et al., 2012; Brown et al., 2005), but is also clearly distinguishable from transformational and transactional leadership (Kalshoven, Den Hartog & De Hoogh, 2011). The ethical leadership

construct is said to be related to job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and OCB (Avey, Wernsing & Palansky, 2012; Den Hartog & Beslschak, 2012; Kalshoven et al., 2011; Kim & Brymer, 2011; Ponnu & Tennakoon, 2009). However, more research is still needed (Den Hartog et al., 2012).

#### **4.3.1 Ethical leadership and work engagement**

Leaders who possess an ethical identity are thought to affect employees' attitudes and work behaviours (Den Hartog & Belschak, 2012). The social learning perspective suggests that employees imitate favourable behaviours of ethical leaders and adopt leaders' emphasis on integrity, trust and shared values by integrating these into their identity (Brown et al., 2005). In spite of this, Kalshoven and Den Hartog (2009) found that employees view ethical leaders as an ideal representation of the group's identity (that is, as more prototypical of the group and as prescribing appropriate attitudes and behaviours see Hogg, 2001). According to Den Hartog et al. (2012), the process of identification implies that demonstrating effort towards accomplishing the valued-laden goals that ethical leaders communicate becomes an intrinsically motivating expression of employees' self-concept. Similarly, Piccolo, Greenbaum, Den Hartog and Folger (2010) found that ethical leadership helps employees to view their jobs as more meaningful, which translates into increased effort and productive behaviour. Thus, employees of ethical leaders are more likely to be emotionally connected, intrinsically motivated if they perceive their leader to be honest, treating them fairly and acting with integrity. Ethical leaders who stimulate employees' work engagement (as a unique motivational state) seem, in turn, to enhance employees' job satisfaction, commitment and citizenship behaviour (Bakker, Demerouti & Verbeke, 2004). Work engagement is shown to mediate the relationship between charismatic leadership and OCB (Babcock-Roberson & Strickland, 2010).

Research has linked transformational (Christian, Garza & Slaughter, 2011), charismatic (Babcock-Roberson & Strickland, 2010), and authentic leadership (Walumbwa, Wang, Wang, Schaubroeck & Avolio, 2010) to work engagement, with the conclusion that leaders who serve as a source of guidance, inspiration and motivation help to foster an emotional and cognitive connection to one's work role (Macey & Schneider, 2008; Parverse-Kaplan, 2013). These leadership approaches are found to contain some components of ethical leadership (Brown et al., 2005). Therefore, one could hypothesise that when an ethical leader is present, an employee is more engaged, satisfied and committed in his or her work,

which in turn displays discretionary effort behaviour. Den Hartog et al. (2012) posit that the relationship between ethical leadership and work engagement remains to be tested. In general, one can expect followers to be engaged, satisfied and committed, and to demonstrate citizenship behaviour in their work because of ethical leaders being people-oriented, treating others fairly, sharing power, clarifying roles, displaying integrity, and providing ethical guidance (Kalshoven et al., 2011). In other words, when employees perceive their leader as providing ethical guidance, exhibiting fairness, and acting with integrity, they will be more likely to have a trust in their leaders and be more willing to invest themselves in their work. Conversely, if they perceive their leader to lack guidance, fairness and integrity or act unethically, they will be less likely to be emotionally connected to their work role. It is proposed in this study that, ethical leadership is related to work engagement in the DRC's context.

#### **4.3.2 Ethical leadership and job satisfaction**

Ethical leadership is shown to be positively related to higher levels of job satisfaction in traditional organisations (Ghazali, Ghorban & Ghahroodi, 2013). Ethical leadership as an expression of regulated behaviour within personal relationships in the organisation can enhance employees' ethical behaviour and satisfaction with some aspects of the job. Liu, Lin and Hu (2013) indicate that when employees are treated fairly, and believe that leaders' behaviours are beneficial to them and the organisation, they will be more likely to demonstrate positive feelings, attitudes and emotional affective towards the organisation (higher level of job satisfaction and commitment). Conversely, if they are not treated fairly and perceive leaders' behaviour to be selfish, and unethical, they will be less likely to be satisfied and committed, which in turn can lead to higher levels of turnover intention (Munir, Malik, Javaid, Arshad, Khalid, Nawaz & Nazir, 2013).

Kim et al. (2011) conducted a study on the effects of ethical leadership on managers' job satisfaction and affective commitment. They found ethical leadership to be positively related to both job satisfaction and affective commitment. Furthermore, it was found to be positively related to intrinsic motivation and organisational alignment (Kim et al., 2011). Brown et al. (2005) also demonstrated a relationship between ethical leadership and employees' satisfaction with a leader and job commitment. Ghazali et al. (2013) indicate that when leaders are considered to be role models in their respective organisations, their employees tend to be satisfied and committed. Job satisfaction has also been associated with the consideration-oriented leadership style (Mitonga-Monga, Coetzee & Cilliers, 2012; Yuki,

2006). However, as seen before, ethical leadership consists of both consideration and structuring behaviour. Consideration behaviour, such as concern for the needs of organisational members, as well as structuring behaviour, in which managers provide employees with clear goals, tasks and agendas, ensure that ethical standards are met (Brown & Treviño, 2006a).

The above is in line with the studies (Brown et al., 2005; Kim et al., 2011) which clearly demonstrate the effects of ethical leadership. They postulate that ethical leadership relate positively to employees' satisfaction with leaders, promotion, pay and with exerting effort and willingness to report bad behaviours. Employees who perceived their leaders to be fair, acting with integrity, and concern for them, were found to be committed to the organisation, holding more favourable attitudes towards work and more likely to help colleagues, willingly report unethical behaviour, and less likely to leave their jobs (Gebremichael & Rao, 2013). Overall, one can expect that employees will be more satisfied about their jobs because of ethical leaders' honesty, trustworthiness, caring and concern for others (Brown & Treviño, 2006a). Building on previous research, this study proposes that ethical leadership will be related to employees' job satisfaction in the DRC context.

#### **4.3.3 Ethical leadership and organisational commitment**

The relationship between ethical leadership and employee commitment has been well documented (Brown & Treviño, 2006). A recent study conducted by Philipp and Lopez (2013) indicates from the social learning perspectives that leaders who display positive ethical behaviours promote an ethical work environment by modelling and encouraging ethical behaviour among employees, which may enhance the level of employees' normative and affective attachment to the organisation. It became clear that ethical leadership has a positive impact on employee's outcomes and behaviour (Avey, Wernsing & Palanski, 2012). Previous research evidenced that employee's perceptions of ethical leadership positively related to affective and normative commitment (Den Hoogh et al., 2008; Kim et al., 2011), and overall organisational commitment (Ghazali, Gharban & Ghahroodi, 2013; Ponnu & Tennakoom, 2009). There is also evidence that ethical leadership behaviour is positively associated not only with employees' level of commitment but also with satisfaction and OCB (Treviño & Brown, 2004).

According to Bello (2012), employees who perceive their leaders to be honest, fair, treating them with dignity and acting with integrity, are more likely to engage in their job, be satisfied

and demonstrate higher level of commitments to the organisation. Employees, who perceive their leaders to engage in behaviour that is beneficial to them, will be more likely to stay for longer in the organisation (Ponnu et al., 2009).

It is reasonable to expect that employees having a leader who is a role model, treats them with respect, and acts with integrity, will be more likely to be affectively and normatively committed to the organisation. Conversely, if their leader acts without respect and honesty and displays low levels of moral standards and fairness, they will be less likely to strengthen their feelings of moral, affective and normative commitment to the organisation. These resemble the findings of Zhu, May and Avolio (2004) who postulate that leadership dimensions such as employee empowerment, initiating structure, consideration, communication, and participative leadership are all antecedents of organisational commitment at the individual level. Thus, prior studies have shown that organisational commitment is greater among employees whose leaders encourage power sharing and treat them with consideration, fairness, respect and dignity (Den Hartog et al., 2008).

Ghazadi et al. (2013) propose that there is a positive relationship between ethical leadership and middle managers' affective commitment. Similarly, Brown et al. (2005) found, in various studies conducted with MBA students, employees from large and multinational financial service organisations and others, that employees of an ethical leader are willing to put extra effort into their work (job dedication/ job commitment). Overall, one would expect that employees will be more committed to their organisation if their leaders demonstrate fair treatment, consideration, power sharing, guidance, integrity and concern for others (Brown et al., 2006). Therefore, it is hypothesised that ethical leadership will be related to organisational commitment in the DRC context.

#### **4.3.4 Ethical leadership and OCB**

The link between ethical leadership and OCB has been well documented. Several studies have been conducted on the roles ethical leader can play in increasing extra-role behaviour in the organisation. A study by Bello (2012) reveals that ethical leadership may play a mediating effect in the relationship between organisational culture and employee outcome. He postulates that ethical leadership is more likely to increase willingness of employees to put in extra effort on task performance, which will lead to higher levels of their performance (Ruiz, Ruiz & Martinez, 2011). Previous studies by prominent leadership scholars have

consistently found that leadership affects employees' attitudes and performance (Avolio & Yammarino, 2002; Bambale, Shamsudin & Subramanian, 2011; Bass et al., 2008).

Previous studies have discovered a relationship between ethical leadership behaviour and OCB. Some of these studies reported that higher levels of ethical leadership behaviour are related to higher levels of in-role and extra-role behaviour (Philipp & Lopez, 2013).

OCB is perceived to improve performance and promote the effective functioning of the organisation (Kalshoven et al., 2011). OCB has been found to be associated with different leadership approaches such as transformational, transactional, charismatic, authentic and behavioural leadership styles. Shanker and Sayeed (2012) found that transformational leadership has positive and direct effects on OCB. Similarly, Babcock-Roberso et al. (2010) report a positive relationship between charismatic leadership and OCB.

Furthermore, Bambale et al. (2011) conducted a study on leadership paradigms and OCB, and found positive relationships between transformational, transactional, ethical and servant leadership, as well as initiating structure and consideration, and OCB. Ethical leaders, as conceptualised by Brown et al. (2005), are those who act with the best interests of employees in mind. Such actions, reflecting the virtue of love (Neubert, Galson, Kacmar, Roberts & Chanko, 2009), make leaders credible and trustworthy from the perspective of their subordinates (Caldwell & Dixson, 2010; Ruiz-Palomino et al., 2013).

Overall, one would expect that ethical leaders who demonstrate concern for others, treat others fairly and are caring will enhance the likelihood of OCB. It is hypothesised in this study that ethical leadership will be positively related with OCB in the DRC context.

#### **4.3.5 Ethical leadership and moderator variables**

The literature review on leader demographics associated with ethical leadership has failed to find evidence of relationships between leader demographics (such as age, gender, educational level, length of experience) (Brown & Treviño, 2006). However, Eagly and Carli (2003) address the question of a relationship between gender and ethical leadership, since gender-based differences have long intrigued scholars in the field of leadership and ethics (Eagly et al., 2003). Some authors have argued strongly in favour of differences in moral development and moral reasoning between males and females (Gilligan, 1982). However, Rest (1986) posits that Gilligan's claim was not based upon a systematic review of moral judgment literature. Tietjen and Walker (1985) extensively reviewed the said literature and

reported no difference between males and females when various versions of Kohlberg's tests of moral judgment were used. Similarly, research by Brown and Treviño (2006b) found no gender differences in ethical leadership. However, research on ethical leadership and job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) has not yet been conducted in the DRC's context. Therefore, this study proposes that gender, age, educational level and length of service will moderate the relationship between ethical leadership and the job retention and performance

#### **4.4 CHAPTER SUMMARY**

Chapter 4 addressed part of the third research aim, namely to explore the theoretical relationship between ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership), job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) and biographical characteristics.

Therefore, this aim was partly achieved in this chapter.

Chapter 5 addresses part of the fourth research aim, namely to construct a theoretical model on the relationship between ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership), job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) and biographical characteristics (measured in terms of age, gender, educational level and job tenure).

## **CHAPTER 5 THE CONSTRUCTION OF A THEORETICAL MODEL FOR THE RELATIONSHIP BETWEEN ETHICAL CONTEXT AND BEHAVIOUR, JOB RETENTION AND PERFORMANCE AND BIOGRAPHICAL CHARACTERISTICS**

This chapter addresses part of the fourth research aim, namely to construct a theoretical model on the relationship between ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership), job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), and biographical characteristics (measured in terms of age, gender, educational level and job tenure). These will be discussed and hypotheses will then be proposed.

### **5.1 ETHICAL CULTURE AND JOB RETENTION/PERFORMANCE AND BIOGRAPHICAL CHARACTERISTICS**

Ethical culture has important implications for the retention and performance of employees. As previously mentioned, a positive ethical culture has been linked to higher levels of work engagement (Huhtala et al., 2011), job satisfaction (Tsai & Huang, 2008), organisational commitment (Chu, Shin, Choi & Kim, 2013), and in-role and extra-role behaviour (Ruiz-Palomino & Martínez-Cañas, 2013), as well as reduced turnover intention (Valentine, Godkin, Fleischman & Kidwell, 2011).

Ethical culture encompasses the experiences, assumptions and expectations of managers and employees regarding how the organisation prevents them from behaving unethically and encourages them to behave ethically (Kaptein, 2008). Ethical culture (as accepted behavioural standards) gives organisational members the ability to be guided by a pattern of shared learned beliefs, traditions and principles, which helps them to align their behaviours. When an organisation dedicates more time and resources to developing a positive work environment where ethical culture is encouraged, respected and enforced, employees will respond more favourably with positive behaviour, attitudes and beneficial conduct (Valentine et al., 2011).

A positive work environment may well also result in a variety of desirable work outcomes, such as higher levels of work engagement, satisfaction, commitment, and work performance. This is evident when employees perceive their work environment to be conducive to a positive ethical culture or to encourage norms and conduct: they are then more likely to be

emotionally and cognitively connected to their job, and may decide to stay with the organisation. Furthermore, they are likely to be energetic, focused, emotionally attached to the latter, and to respond positively with a higher level of discretionary effort. A positive work environment, which is characterised by organisational resources such as an ethical culture, tends to enhance employees' level of work engagement, well-being, positive attitudes (e.g. organisational commitment) and performance (e.g. extra-role performance) (Albrecht & Su, 2012).

The literature also identifies several variables as being related to ethical culture and job retention and performance, which consist of work engagement, job satisfaction, organisational commitment and OCB. One of these variables is personal demographic characteristics, including age, gender, educational level and work experience or tenure.

### **5.1.1 Age as a moderator**

An entire body of literature exists on research that has been conducted into ethical culture, job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB, and age. Research has frequently predicted the relationship between age and strictness of ethical judgments to be positive (Nikoomaram, Roodposhti, Ashlagh, Lotfi & Taghipourian, 2013; Peterson et al., 2001). In other words, as noted, individuals tend to be more ethical when they grow older. Some studies have found that younger employees render stricter ethical judgments than older employees (Barnett & Valentine, 2004), while other studies report the no significant relationship between age and ethical judgments (Schepers, 2003). Despite these inconsistencies, the theoretical consensus appears to support the idea that age improves one's ability to perceive one's work environment as being ethical and to apply relevant ethical standards, which results in more disapproving views of unethical behaviour. This implies that older individuals who possess a higher level of ethical beliefs and who are less likely to be influenced by individuals around them at work and home are likely to perceive their work environment to be conducive to a positive ethical culture, be satisfied with their working conditions, engaged, committed and prepared to go the extra mile or be engaged in activities that benefit the organisation (Wang, 2014). For this study it is hypothesised that ethical culture will be positively related to job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. In addition, it is hypothesised that age will moderate the relationship between ethical culture and job retention and performance (see Figure 5.1 below).

### **5.1.2 Gender as a moderator**

Gender is a variable for which empirical results differ across studies. A great deal of previous research has focused on how an individual's ethical perspectives are related to gender. Previous study by Jones and Kavanagh (1996) found no significant differences between men and women with regard to ethical attitudes. Whilst Sweeney, Arnold and Pierce (2010) provides evidence of a significant relationship between gender and ethical judgements. Despite these variations, the theoretical consensus appears to support the notion that this difference can be attributed to socialisation (Roxas & Stoneback, 2004). According to Wang (2014), women who perceive their work environment as providing positive job resources, such as an ethical culture, are likely to be engaged, satisfied, committed to the organisation, and to engage in discretionary behaviour that contributes to the functioning of the organisation. It is hypothesised that ethical culture will be related to job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB). Furthermore, for this study it is hypothesised that gender will moderate the relationship between ethical culture and the job retention and performance constructs (see Figure 5.1 below).

### **5.1.3 Educational level as a moderator**

The literature seems to suggest that individuals who better understand complex and nuanced issues will display more sophisticated levels of moral reasoning. In light of this view, researchers frequently theorise positive relationships between educational level and ethical judgment. Empirically, however, the evidence does not appear to support this view (Nikoomaram et al., 2013). Many studies fail to establish a link between educational level and ethical behaviour (Huthala et al., 2013), while others report negative relationships (Chiu, 2003). Accordingly, Pierce et al. (2010) indicate that there is a need to determine whether or not the ethicality of employees varies according to their level of educational level. A higher level of educational level might encourage individuals to be more fully engaged in ethical behaviour, as opposed to unethical behaviour, in their work environment. Individuals with a high educational level who perceive their work environment as favourable and ethical are likely to demonstrate a higher level of engagement, be satisfied, committed to the organisation, and to engage in extra-role behaviour. It is hypothesised that ethical culture will be positively related to job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Moreover, it is hypothesised that the

educational level will moderate the relationship between ethical culture and job retention and performance constructs (see figure 5.1 below).

#### **5.1.4 Job tenure as a moderator**

With regard to tenure and ethical culture, contradictory empirical evidence exists among studies. Chiu (2003) found that, job tenure reduces the strictness of ethical judgements, whereas Kidwell, Stevens and Bethke (1987) find that tenure leads to stricter ethical judgments. A study by Barnett and Valentine (2004) report a higher level of ethical behaviour to be related with job tenure (Barnett & Valentine, ), while others reports no relationship between job tenure and moral judgement (Pennino, 2002; Schepers, 2003). This implies that as the number of years of tenure increases, principled reasoning decreases. However, Nikoomaram et al. (2013) posit that as an individual spends more time in an organisation, his or her socialisation is strengthened, which may increase his or her respect for ethical standards. A tenured employee who perceives his or her work environment to have positive ethical standards is likely to be satisfied, engaged, committed to the organisation, and to contribute by engaging in extra-role behaviour. It is hypothesised that ethical culture will be related to job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Furthermore, it is hypothesised that tenure or work experience will moderate the relationship between ethical culture and job retention and performance constructs (see Figure 5.1 below).

## **5.2 ETHICAL CLIMATE AND JOB RETENTION/PERFORMANCE AND BIOGRAPHICAL CHARACTERISTICS**

Ethical climate has important implications for the retention and performance of employees. As previously mentioned, ethical climate has been associated with higher levels of work engagement (Young, 2012), job satisfaction (Kapp & Parboteeah, 2008), organisational commitment (Martin et al., 2006), and in-role and extra-role behaviour (Leung, 2008), as well as a reduction in turnover intention (Jamarillo, Mulki & Solomon, 2006). Ethical climate improve relationships within an organisation, employee attitudes and behaviours, as well as enhancing performance (Liu et al., 2013; et al., 2006). When individuals perceive an ethical climate to exist in relation to organisational policies, procedures, practices, remuneration systems and promotions, they will be more likely to provide not only good and expected service, but will also develop positive relationships with their co-workers and customers (Liu et al., 2013).

An ethical work climate is viewed as having an impact on the overall success of the organisation and distinct work outcomes, such as work engagement, satisfaction, commitment, and OCB. When employees believe that certain forms of ethical reasoning or behaviour are expected standards or norms for decision-making within the organisation, they will be more likely to be satisfied, engaged, committed to the organisation, and to engage in OCB. Conversely, when certain forms of ethical reasoning are not expected standards for decision-making, employees will be less likely to be satisfied, engaged, committed to the organisation, and to engage in OCB.

The literature also indicates that ethical climate is related to both job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB, and the demographical characteristics of age, gender, educational level and tenure or work experience.

### **5.2.1 Age as a moderator**

Previous studies linking age to ethical climate have yielded mixed findings, although most studies have found an increase in ethical behaviour with age. Other studies have found age to not play a significant role in explaining moral judgment (Sidani, Zbib, Rawwas & Moussawer, 2009). However, Borkowski and Ugras (1998), in their meta-analysis of 35 studies that included age as a factor, posited that individuals tend to portray positive attitudes and behaviours and perceive the atmosphere of their working environment as more positive when they mature in age. In addition, Forte (2004) found that younger employees perceived there to be a stronger ethical climate and older employees perceived their organisation to have a rules climate. In contrast, Shafer (2015) and Singhapakdi, Lee, Sirgy and Senasu (2015) found that older employees perceived the ethical climate of their working environment to be more positive than their younger counterparts did. Despite these inconsistencies, the theoretical consensus appears to suggest that younger employees' perception of their working environment tends to be shaped by organisational values such as what is right and wrong and what values are core values right from the beginning of their attachment to the organisation. In contrast, older employees, who have considerable experience with regard to the imposed organisational values, can make their own predictions and interpretations based on their experience. This implies that older employees who perceive their work environment as having a good code of conduct, regulations, practices and policies are likely to be satisfied, engaged, committed to the organisation, and to portray extra-role behaviour that contributes to the functioning of the organisation. It is hypothesised

that ethical climate will be related to job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. In addition, it is hypothesised that age will moderate the relationship between ethical climate and job retention and performance constructs (see Figure 5.1 below).

### **5.2.2 Gender as a moderator**

The issue of whether or not men and women differ in their perceptions of ethical climate and social issues has been widely debated in the business ethics literature. Sidani et al. (2008) found that there are gender differences in moral development or ethical orientation, with women tending to exhibit higher levels of ethical orientation than men. In contrast, some studies found no or insignificant ethical differences based on gender (AL-Omari, 2013). Parboteeah, Hoegl and Cullen (2008) found gender to be a positive predictor of ethical climate. The study conducted by Miller and Costello (2001) established that women and men differ in their perceptions of a caring climate. This suggests that women tend to view problems in relation to care, involving empathy and compassion, while men appear to conceptualise them as problems of rights, justice and fairness. However, Stedham, Yamamura and Beekun (2007) report that studies on gender differences in perceptions of an ethical climate have had mixed results. In spite of these differences in terms of findings, scholars indicate that if there are indeed gender differences, the reasons for this are not clear. The theoretical consensus appears to suggest that gendered behaviour is linked to biological roots (Miller & Costello, 2001). This implies that men and women are biologically predisposed to act in a certain manner, and that this predisposition makes them behave more or less ethically in a given situation. Sidani, Zbib, Rawwas and Moussawer (2009) aptly comment that gender differences found in other studies may be context-specific. Miller et al. (2001) found that men perceived a more caring climate than women did. This indicates that men who perceive their work environment as having norms, regulations, policies and positive practices (positive ethical climate) are likely to be engaged, satisfied, committed to their organisation, and to engage in discretionary behaviour. It is hypothesised that ethical climate will be positively related to job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Furthermore, it is hypothesised that gender will moderate the relationship between ethical climate and job retention and performance constructs (see Figure 5.1 below).

### **5.2.3 Educational level as a moderator**

As with the other biographical variables, contradictory empirical evidence can be found in studies focusing on educational level and perceptions of an ethical climate. Kohlberg (1983) indicates that an individual's level of educational level influences his or her moral development. Many studies report a partial correlation between educational level and perceptions of an ethical climate (Goldman & Tabak, 2010), while others fail to establish a link between educational level and ethical climate. However, Malloy and Ararwal (2003) indicate that people with a higher educational level tend to be more utilitarian and have a more cynical view of ethical climate than people with a lower educational level. Despite these divergent findings, the theoretical consensus appears to suggest that organisations should assign highly educated employees to an ethical training programme and control the mechanisms for them to incline, observe and respect the rules and codes of conduct. This implies that less educated individuals who perceive their working environment as being socially responsible and fostering good ethical norms, policies, procedures and practices are likely to demonstrate higher levels of engagement, satisfaction, commitment and discretionary behaviour. It is hypothesised that ethical climate will be positively related to job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Moreover, it is hypothesised that educational level will moderate the relationship between ethical climate and job retention and performance constructs (see figure 5.1 below)

### **5.2.4 Job tenure as a moderator**

Job tenure is a variable for which empirical results differ among studies. Research frequently predicts the relationship between tenure and ethical climate (Karatepe & Agbaim, 2012). Forte (2011) found no significant differences between tenure and perceptions of an ethical climate. However, earlier studies show that the longer the tenure, the stronger the ethical attitudes (Victor & Cullen, 1988). A synthesis of literature indicates that job tenure is treated as a nuisance or control variable in many empirical studies (Karatepe et al., 2012). Nonetheless, tenure is viewed as a moderator of the effects of ethical climate on job retention and performance. Since ethical climate is viewed as comprising factors that provide employees with cues about behaviours which are deemed to be acceptable in the organisation. It can therefore be concluded that as individuals' tenure increases, long-tenure individuals are likely to have a deeper understanding of those cues that guide their behaviour in the organisation than less-tenured individuals. Therefore, long-tenure

employees with favourable perceptions of their ethical climate may have a high level of job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. It is hypothesised that ethical climate will be related to job retention and performance. Moreover, it is proposed that tenure will moderate the relationship between ethical climate and job retention and performance constructs (see Figure 5.1 below).

### **5.3 ETHICAL LEADERSHIP AND JOB RETENTION/PERFORMANCE AND BIOGRAPHICAL CHARACTERISTICS**

Ethical leadership is a relatively new area of research and researchers have acknowledged its importance and implications for the retention and performance of employees. As previously mentioned, positive ethical leadership behaviour has been found to be associated with higher levels of work engagement (Den Hartog & Belschak, 2012), job satisfaction, organisational commitment, and in-role and extra-role behaviour, as well as a decrease in turnover intention (Kwan, Liu & Yim, 2011; Munir, Malik, Javaid, Arshad, Khalid, Nawaz & Nazir, 2013). Ethical leadership and attitudes and behavioural outcomes such as job satisfaction, commitment and discretionary effort were identified as key factors that enhance employees' retention and performance (Kyndt, Dochy, Michielsen & Moeyaert, 2009). Generally, employees, who perceive their leaders to act with integrity and treat them fairly demonstrate a higher level of ethical behaviours, and are more likely to be satisfied, engaged, and committed to their organisation. Yalabik, Popaitoon, Chowne and Rayton (2013) indicate that positive leadership support enhances employees' positive attitudes and behaviour in the workplace, and leads to higher levels of engagement, commitment and citizenship behaviour. The attitudes of employees towards their jobs and the organisation appear to influence their levels of engagement, task performance (extra-role behaviour), and intention to quit in the future. It has become evident that when individuals perceive that good and fair treatment exists, and that they are listened to and provided with the necessary resources by their leaders, they are more likely to be satisfied with aspects of the job, be physically, emotionally and cognitively attached to the organisation, continue their membership of the organisation, and exert more effort in order to achieve organisational goals. Conversely, when they are not treated fairly, listened to or provided with the necessary resources by their leaders, they are less likely to be satisfied, physically, cognitively and emotionally connected to the organisation, to remain with the employer, and to engage in extra-role behaviour (Risick, Hargis, Shao & Dust, 2013).

The literature provides further evidence to suggest that several variables are linked to ethical leadership and job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. These variables include demographic variables such as age, gender, educational level and work experience or tenure (see Figure 5.1 below).

### **5.3.1 Age as a moderator**

A synthesis of relevant literature indicates that age is a variable for which results vary across studies. Schminke, Ambrose and Miles (2003) found age to positively affect individuals' perceptions of others' ethical behaviour. Pellitier and Bligh (2006) found that age predicted employees' perceptions of their organisational ethics programme and ethical leaders' behaviour. Employees who were older perceived the organisation's ethics programme and their ethical leaders to be more effective than younger employees did, which suggests that older workers may be more inclined to give a new programme a chance before making a judgment, and to view their leaders as role models. Brown et al. (2005) report no significant differences in relation to age and perceptions of ethical leadership. Age is considered to be a control variable in many empirical studies (Brown et al., 2005). However, in this study, age is viewed as a moderator of the relationship between ethical leadership and job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. As mentioned by Mayer, Kuenzi, Greenbaum, Bardes and Salvador (2009), ethical leaders are individuals who act with fairness, respect, and have the best interests of others in mind. Older employees who perceive their ethical leaders to be fair as well are likely to be emotionally connected to the organisation, satisfied, committed, and to engage in extra-role behaviour. It is hypothesised that ethical leadership will be related to job retention and performance. Moreover, it is hypothesised that age will moderate the relationship between ethical leadership and job retention and performance constructs (see Figure 5.1 below).

### **5.3.2 Gender as a moderator**

A plethora of literature exists on the relationship between gender and ethical leadership and job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB (Brown & Treviño, 2006). Brown et al. (2005) indicate that many studies have failed to demonstrate gender differences in terms of ethics, while other studies have found that male and female employees equally perceive their supervisor

to be highly ethical (McCann & Holt, 2009). However, Mitonga-Monga, Coetzee and Cilliers (2012) found significant gender differences in terms of perceptions of leadership styles. In this regard, male employees tend to perceive their leaders' style to be significantly more positive than their female counterparts do (Mitonga-Monga et al, 2012). Men who perceive their ethical leaders as treating them with fairness, respect, dignity and integrity are likely to be satisfied with their working conditions, and psychologically and emotionally connected to the organisation. They are also likely to be committed and engage in discretionary behaviour that is beneficial to the functioning of the organisation. It is hypothesised that ethical leadership will be related to job retention and performance. Furthermore, it is hypothesised that gender will moderate the relationship between ethical leadership and job retention and performance constructs (see Figure 5.1 below).

### **5.3.3 Educational level as a moderator**

Educational level is a variable for which empirical results differ across studies. McCann et al. (2008) found no significant differences in terms of educational level and perceptions of ethical leaders, while other studies have only treated educational level as a control variable. Based on this view, researchers frequently hypothesise a positive relationship between educational level and ethical leadership. Empirically, however, the evidence does not appear to support this view. Many studies fail to find a link between educational level and ethical leadership (Kalshoven et al, 2011). As mentioned by Den Hartog and Belschak (2012), an ethical leader must be a role model for employees by acting with integrity, respect and fairness, both outside and inside the organisation. As employees' level of educational level increases, highly educated employees are likely to perceive their ethical leaders as fair and emulate their behaviour. Therefore, it is hypothesised that ethical leadership will be positively related to job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Although educational level has been used in other empirical studies as a control variable (Brown et al., 2005; Mayer, Aquino, Greenbaum & Kuezi, 2012), empirical evidence regarding its moderating role in this area is lacking. It is hypothesised that educational level will moderate the relationship between ethical leadership and job retention and performance constructs (See Figure 5.1 below).

### **5.3.4 Job tenure as a moderator**

A review of the literature indicates that tenure, like other biographical variables, is viewed as a control variable in a significant number of empirical studies (Karatepe & Agbaim, 2012).

However, in this study, tenure is regarded as a moderator of the relationship between ethical leadership and job retention and performance, conceptualised as work engagement, satisfaction, commitment and OCB. According to Brown et al. (2006), an ethical leader is a role model who communicates with and acts in a fair manner towards his or her subordinates in the organisation, which may influence employees' behaviour and attitudes. As tenure increases, individuals are likely to perceive fair treatment by their role model leaders. Consequently, long-tenured individuals with a positive perception of their ethical leader may demonstrate a higher level of engagement, be satisfied, committed, and engage in extra-role behaviour that contributes to the organisation. It is hypothesised that ethical leadership will be related to job retention and performance. Furthermore, it is proposed that tenure will moderate the relationship between ethical leadership and job retention and performance constructs (See Figure 5.1 below).

#### **5.4 CHAPTER SUMMARY**

Chapter 5 addressed the fourth literature research aim, namely to construct a theoretical model of the relationship between ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership), and job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) and biographical characteristics (measured in terms of age, gender, educational level and job tenure

Therefore, the research aims four of the literature review have been achieved.

Chapter 6 discusses the empirical study and the statistical procedures used for testing the research hypotheses, and addresses research steps 1 to 6 in relation to the study.

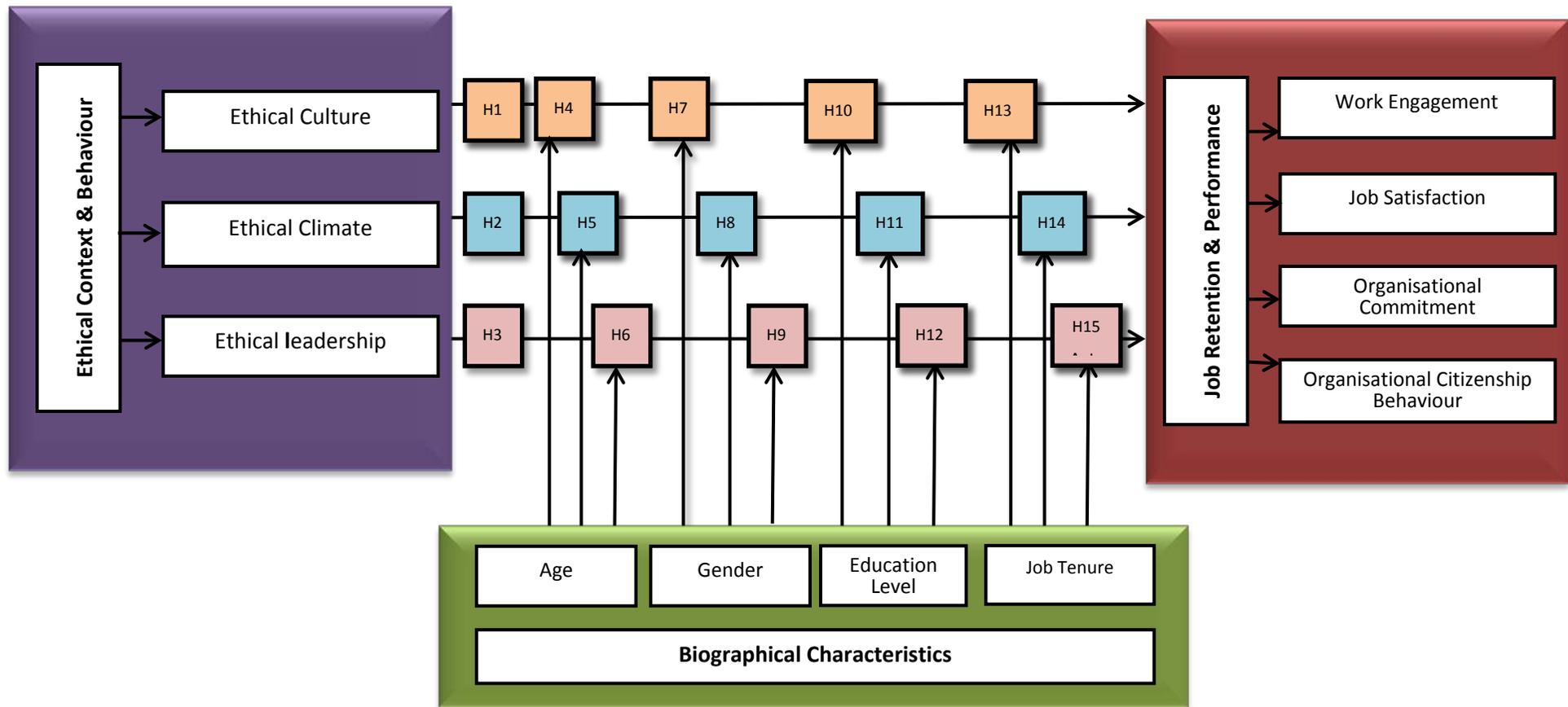


Figure 5.1. Conceptual model for understanding the effects of ethical context and behaviour on job retention and performance factors.

## **CHAPTER 6 RESEARCH DESIGN**

Chapter 6 addresses the empirical study and the statistical procedures used for testing the research hypotheses. Firstly, an overview of the study's population and sample is presented. The measuring instruments will be discussed and the choice and discussion of each will be justified, followed by the administration, the scoring of the psychometric battery, the research hypothesis and a description of the data gathering and statistical processing methods. The formulation of the research hypotheses will be stated, and the chapter will conclude with a chapter summary.

The empirical research phase consists of the following nine steps:

- Step 1 Determination and description of the sample;
- Step 2 Choice and discussion of the psychometric battery;
- Step 3 Administration of the psychometric battery;
- Step 4 Scoring of the psychometric battery;
- Step 5 Formulation of the research hypotheses;
- Step 6 Statistical processing of the data;
- Step 7 Reporting and interpreting of the results;
- Step 8 Integration of the research findings; and
- Step 9 Formulation of research conclusions, limitations and recommendations.

Steps 1-6 are addressed in this chapter, and steps 7-9 are addressed in chapters 7 and 8.

### **6.1 DETERMINATION AND DESCRIPTION OF THE SAMPLE**

According to Weathington, Cunningham and Pittenger (2010), a population can be defined as a set of objects or cluster of people that forms part of the purpose of the research and about which the research would like to isolate certain characteristics. A sample is a subset of the population and can be defined as a constellation of the entire population that has been drawn, and in which the researcher is interested (Tredoux & Durrheim, 2013).

One transport organisation was researched in this study, namely the Office National de Transport (ONATRA). It is situated in Kinshasa in the DRC. The determining factor when making a decision concerning the sample size is the degree to which the sample will be representative of the entire population. According to Whitley and Kite (2013), sampling is the process of selecting items, objects or elements from the population, so that by studying and

understanding the properties or characteristics of the subjects, the researcher is able to generalise these to the larger population.

There are two categories of sampling, namely probability and non-probability (Tredoux et al., 2013). In the former, the researcher decides in advance that each element of the population will be represented in the sample. In the latter, the researcher has no way of guaranteeing that each element of the sample will be represented in the sample. This study utilised non-probability sampling, as well as a specific method called purposive sampling, which forms part of the non-probability method (Whitley et al., 2013). The purposive sampling method allows the researcher to collect the data in a purposive manner from a ready and available population. Non-probability samples are used when researchers face difficulties in terms of the cost involved and limitations relating to experimental manipulation or the types of measures that the researcher can use (Tredoux et al., 2013).

In this study, the population consisted of 2500 individuals (employees) permanently employed in a Railway organisation (transport) operating in Kinshasa in the DRC. The sample consisted of individuals (employees) permanently employed in this organisation. These individuals made up the sample of N=1300. A total of 839 questionnaires were identified as usable for the purpose of the study (n=839). A response rate of 65% was thus achieved.

The profile of the sample is described according to the following biographical variables: Gender, age, educational level, and tenure in the organisation. The decision to include these categories of variables was based on the identification of the variables that influence or moderate the relationship between ethical context and behaviour, conceptualised in the literature review as ethical culture, ethical climate and ethical leadership, and job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

### **6.1.1 Composition of gender groups in the sample**

Table 6.1 and Figure 6.1 below illustrate the gender distribution of the participants included in the sample. There were 68% male participants and 32% female participants in the sample (n = 839).

Table 6.1

*Gender distribution of the sample (n=838)*

<b>Gender</b>		Frequency	Percent	Valid percent	Cumulative percent
Valid	Males	574	68.4	68.4	68.4
	Females	265	31.6	31.6	100.0
	Total	839	100.0	100.0	

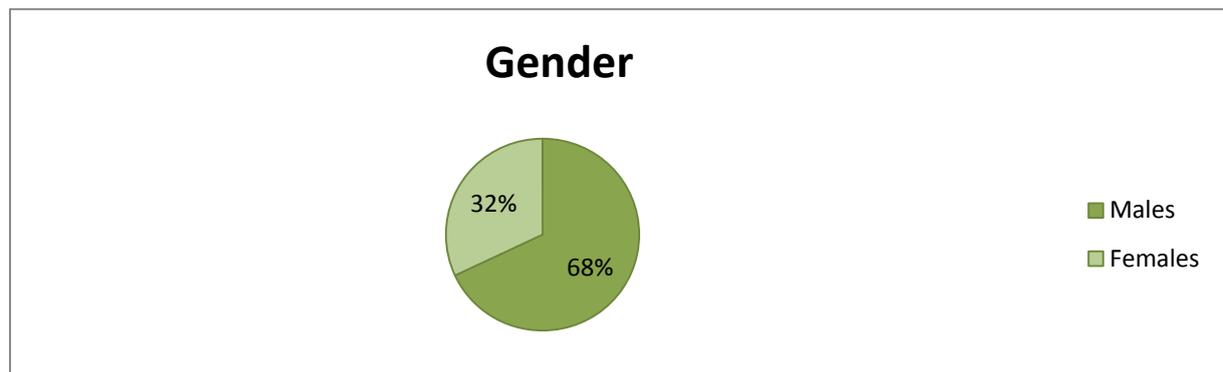


Figure 6.1. Sample distribution by gender (n = 839).

### 6.1.2 Composition of age groups in the sample

Table 6.2 and Figure 6.2 below indicate the age distribution of the sample. Participants aged 25 years and younger comprised 25% of the sample; those in the age group of 26-40 years comprised 63%; those aged 41- 55 years 10%; and those who were 56 and older comprised 2% of the total sample (n= 839).

Table 6.2

*Age distribution of the sample (n=839)*

<b>Age</b>		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25 years and younger	212	25.3	25.3	25.3
	26 to 40 years	529	63.1	63.1	88.3
	41 to 55 years	83	9.9	9.9	98.2
	56 and older	15	1.8	1.8	100.0
Total		839	100.0	100.0	

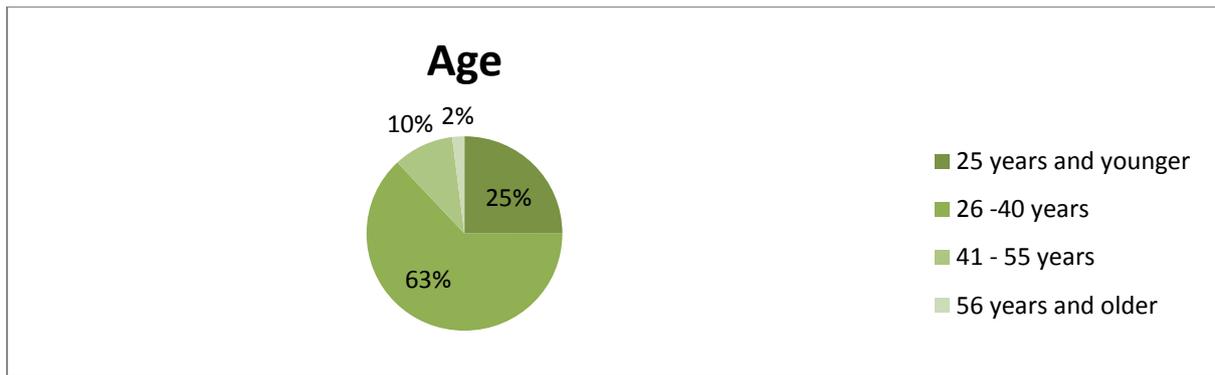


Figure 6.2. Sample distribution by age (n=839).

### 6.1.3 Composition of the sample according to educational level

Table 6.3 and Figure 6.3 below indicate the educational distribution of the participants in the sample. The majority of the employees had an Honours degree (38.4%) or Bachelor's degree (28.1%), followed by those with a national diploma (22.2%). Only 10.7% had a Master's degree and 0.6% had a Doctoral degree.

Table 6.3

Educational level distribution of the sample (n=839)

Educational Level					
		Frequency	Percent	Valid Percent	Cumulative percent
Valid	National Diploma	186	22.2	22.2	22.2
	Bachelor degree	236	28.1	28.1	50.3
	Honours degree	322	38.4	38.4	88.7
	Masters	90	10.7	10.7	99.4
	Doctorate	5	.6	.6	100.0
	Total	839	100.0	100.0	

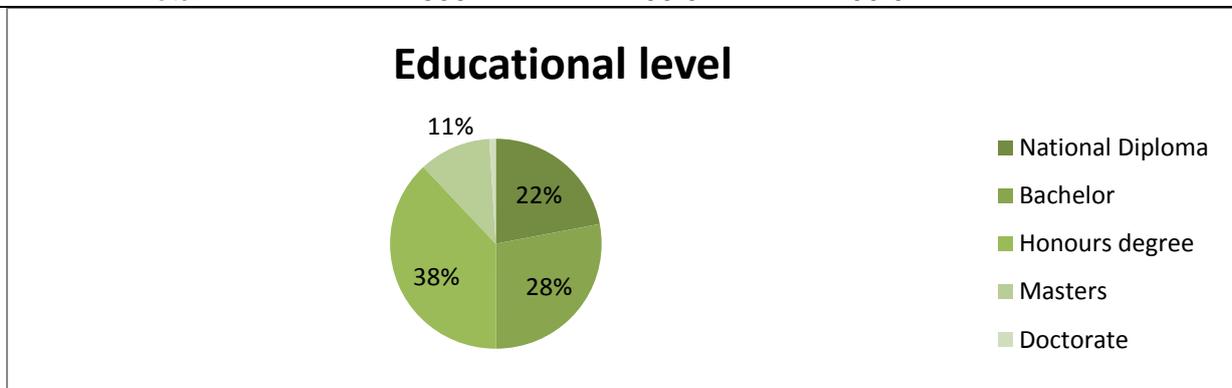


Figure 6.3. Sample distribution by educational level (n=839).

### 6.1.4 Composition of the sample according to job tenure

Table 6.4 and Figure 6.4 below indicate the tenure distribution of the participants in the sample. The tenure of the respondents was measured according to categories, ranging from 1 year and below to over 21 years, and the frequency seemed to be concentrated around 6 to 10 years (31%). Participants with 1 year tenure and below in the company constituted 9.%; those between 1 and 2 years 10%; those with 3 to 5 years tenure 25%; those with 6 to 10 years tenure 31%; those with 11 to 15 years tenure 21%; those with 16 to 20 years tenure 4%; while those with 21 years and above comprised 1% of the sample (n=839).

Table 6.4

*Tenure distribution of the sample (n =839)*

Tenure					
		Frequency	Percent	Valid percent	Cumulative Percent
Valid	1 year and less	76	8.8	8.8	8.8
	1 - 2 years	57	9.7	9.7	18.5
	3 - 5 years	149	24.9	24.9	43.4
	6 -10 years	510	30.5	30.5	73.9
	11-15 years	27	21.2	21.2	95.1
	16-20 years	16	4.4	4.1	99.2
	21 years and more	4	0.8	0.8	100.0
	Total	839	100.0	100.0	

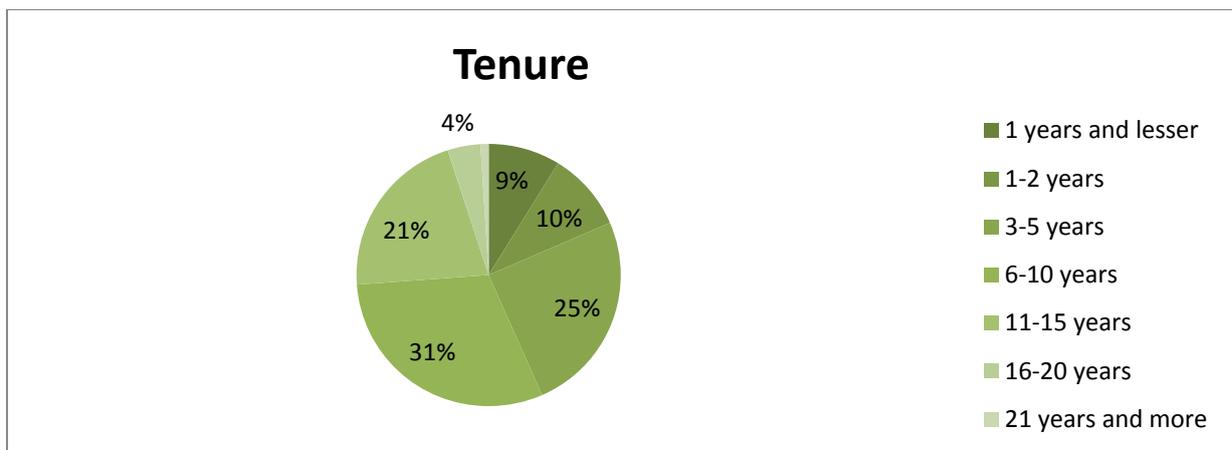


Figure 6.4. Sample distribution by tenure (n=839).

## **6.2 CHOICE, DISCUSSION AND MOTIVATION: THE PSYCHOMETRIC BATTERY**

The choice of psychometric battery was guided by the literature review and the psychometric properties. The literature review can be categorised as exploratory research, in which the relevant models and theories of ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) and job related and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) and biographical characteristics (measured by age, gender, educational level and job tenure) were presented in an integrated manner. The selected instruments were considered for their applicability and relevance to the models and theories of the study. Particular attention was paid to the validity and reliability of the various instruments. According to Tredoux et al. (2013), validity refers to the extent to which the instrument measures what it is supposed to measure. On the other hand, reliability refers to the precision, accuracy and stability of the measuring instrument, in that it accurately and consistently produces the same measurement (Tredoux et al., 2013). The following measuring instruments were chosen.

### **Ethical context and behaviour variables**

- The Corporate Ethical Virtues Questionnaire (CEV) developed by Kaptein (2008), which was used to measure the ethical culture construct.
- The Ethical Climate Questionnaire (ECQ) developed by Victor and Cullen (1987), which was used to measure the ethical climate construct.
- The Ethical Leadership at Work Questionnaire (ELWQ) developed by Kalshoven (2010), which was used, to measure ethical leader behaviour.

### **Job retention and performance-related factors**

- The Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002), which was used to measure the level of work engagement.
- The Job Satisfaction Questionnaire (JSQ) developed by Vitell and Davis (1990), which was used to measure the job satisfaction construct.
- The Organisational Commitment Scale (OCS) developed by Meyer and Allen (1997), which was used to measure the organisational commitment construct.
- The OCB Questionnaire (OCBQ) developed by Organ (1988), which was used to measure the OCB constructs.

## **Biographical variables**

A biographical questionnaire was used to gather information on the biographical characteristics of age, gender, educational level and job tenure. Next, the chosen measuring instruments are discussed and their inclusion motivated.

### **6.2.1 Psychometric properties of the measures of ethical context and behaviour variables**

The discussion (rationale for and purpose, dimensions, administration, interpretation, reliability and validity) and the motivation for choosing the measuring instruments are presented below.

#### *6.2.1.1 The Corporate Ethical Virtues Questionnaire (CEV)*

##### *a) Rationale for and purpose of the CEV*

The CEV (Kaptein, 2008) is a self-rating measure, consisting of eight uni-dimensional corporate ethical virtues, namely clarity, congruency of supervisors, congruency of management, feasibility, supportability, transparency, discussability, and sanctionability. The purpose of the instrument is to measure and understand the ethical culture of organisations (Kaptein, 2008).

##### *b) Dimensions of the CEV*

The questionnaire consists of 58 items and measures eight dimensions (clarity, congruency of supervisors, and congruency of management, feasibility, supportability, transparency, discussability, and sanctionability). Each of these dimensions has a number of items or structured questions which are used to measure it. The following is a detailed description of these eight dimensions.

*Clarity (10 items).* The normative concrete and understandable expectations regarding the conduct of employees.

*Congruency of supervisors (6 items).* The extent to which supervisors or managers provide a good example in terms of ethics.

*Congruency of management (4 items)*. The extent to which the senior management behaves in accordance with ethical expectations.

*Feasibility (6 items)*. The conditions created by the organisation to enable employees to comply with normative expectations.

*Supportability (6 items)*. The extent to which the organisation supports ethical conduct among management and employees.

*Transparency (7 items)*. The degree to which managerial and employee conduct and its consequences are perceptible.

*Discussability (10 items)*. The extent to which ethical issues, such as ethical dilemmas or alleged unethical behavior, can be openly discussed in the organisation.

*Sanctionability (9 items)*. The extent of the enforcement of ethical behaviour through punishment for behaving unethically and rewards for behaving ethically.

#### *c) Administration of the CEV*

The CEV is a self-administered questionnaire. Respondents receive clear instructions regarding how to complete it, and the questionnaire takes about 15 to 20 minutes to complete. Respondents rate the statements on a five-point Likert type scale based on their self-perceived ethical culture. The scores for clarity, congruency of supervisors, congruency of management, feasibility, supportability, transparency, discussability, and sanctionability are added together to provide a total overall score for the construct of CEV (Kaptein, 2009).

#### *d) Interpretation of the CEV*

Each subscale (clarity, congruency of supervisors, congruency of management, feasibility, supportability, transparency, discussability, and sanctionability) is measured separately and reflects the participants' perception of ethical culture on these dimensions. Thus, it is possible to determine which dimensions are perceived to be true for the respondent and which are not. The higher the score, the truer the statement is for the respondent. A response of 1 = strongly disagree and 5 =strongly agree.

*e) Reliability and validity of the CEV*

Research findings on the internal consistency of this questionnaire indicate that it is a reliable instrument for measuring ethical culture (Kaptein, 2008). An exploratory factor analysis indicated that the CEV items not only satisfied the psychometric criteria of both convergent and discriminant validity, but also that the content was appropriate to the theoretical constructs which were considered (Kaptein, 2008). A study conducted by Kaptein (2008) showed that the Cronbach's Alpha for each subscale ranged from .93 to .96. Research by Kaptein (2009) indicated that the Cronbach's Alpha internal consistency coefficient for each subscale ranged from .78 to .92 and .93 for the total ethical culture construct.

*f) Motivation for using the CEV*

The CEV (Kaptein, 2008) was chosen for this study because of the conceptual congruence with the explication of the construct of ethical culture and its high degree of validity and reliability.

*6.2.1.2 The Ethical Climate Questionnaire (ECQ)*

*a) Rationale for and purpose of the ECQ*

The CEV (Cullen & Victor, 1988) is a self-rating measure, consisting of caring, law and codes, rules, independence and instrumental. This measuring instrument is used to determine individuals' perceptions of what is ethically correct behaviour.

*b) Dimensions of the ECQ*

The questionnaire consists of 26 items and measures five dimensions (caring, law and codes, rules, independence and instrumental). Each of these dimensions has a number of items or structured questions that are used to measure it. The following is a detailed description of these five dimensions.

*Caring (7 items).* The extent to which the environment may be characterised by employees who are sincerely interested in the well-being of others.

*Law and Codes (4 items)*. The degree to which employees adhere strictly to the codes and regulations of their profession and organisation.

*Rules (4 items)*. The extent to which employees strictly adhere to the rules and mandates of their organisation or subunit.

*Instrumental (7 items)*. The measures the extent to which employees look out for their own self-interests, first and foremost, even to the exclusion of the interests of others who may be affected by their decisions.

*Independence (4 items)*. The extent to which employees would be expected to be guided by their personal moral beliefs.

c) *Administration of the ECQ*

The ECQ is a self-administered questionnaire and takes about 15 minutes to complete. Clear instructions for its completion are provided. The items are structured in a statement format, with a five-point Likert-type rating scale for each statement. Respondents rate the statements on the basis of their self-perceived ethical climate. The score for caring, law and code, rules, independence and instrumental are then added together to compute a total, overall score for the construct of ECQ (Victor & Cullen, 1988).

d) *Interpretation of the ECQ*

Each subscale (caring, law and codes, rules, independence and instrumental) is measured separately and reflects the participants' perception of the ethical work climate and these dimensions. It is therefore possible to determine which dimensions are perceived to be true for the respondent and which are not. The higher the score, the truer the statement is for the respondent. A response of 1= strongly disagree and 5 = strongly agree.

e) *Reliability and validity of the ECQ*

Research findings on the reliability of this questionnaire indicate that it is a reliable instrument for measuring ethical climate (Victor & Cullen, 1988). An exploratory factor analysis indicated that the ECQ items not only satisfied the psychometric criteria of both convergent and discriminant validity, but also that the content was appropriate to the

theoretical constructs that were considered (Cullen et al., 1993; Peterson, 2002). A study conducted by Victor et al. (1988) reported an acceptable alpha for the five dimensions of caring (.80), law and code (.79), rules (.79), instrument (.71) and independence (.60).

*f) Motivation for using the ECQ*

The ECQ (Victor et al., 1988) was chosen for this study because of the conceptual congruence with the explication of the construct of ethical climate and its high degree of validity and reliability.

*6.2.1.3 The Ethical Leadership at Work Questionnaire (ELWQ)*

*a) Rationale for and purpose of the ELWQ*

The ELWQ (Kalshoven et al., 2011) is a self-rating measure, consisting of fairness, power-sharing, role clarification, people orientation, ethical guidance, concern for sustainability, and integrity. The measuring instrument is used to determine individuals' perceptions of ethical leader behaviour.

*b) Dimensions of the ELWQ*

The questionnaire consists of 38 items and measures seven dimensions (fairness, power-sharing, role clarification, people orientation, ethical guidance, concern for sustainability, and integrity). Each of these dimensions has a number of items or structured questions which are used to measure it. The following is a detailed description of the seven dimensions.

*Fairness (6 items).* The extent to which ethical leaders mostly act with integrity and treat employees fairly, make principled and fair choices, and do not practice favouritism.

*Power sharing (6 items).* The extent to which ethical leaders involve their employees in the decision-making process and listen to their ideas and concerns.

*Role clarification (5 items).* The extent to which ethical leaders communicate openly with their employees, and clarify performance goals and expectations for them.

*People-orientation (7 items).* The extent to which, ethical leaders genuinely care about others, treat them with respect and dignity, and support their employees.

*Ethical guidance (7 items).* The extent to which ethical leaders convey standards regarding ethical conduct, provide guidelines for ethical behaviour and use rewards and punishment to hold employees accountable for their actions.

*Concern for sustainability (3 items).* The extent to which, ethical leaders are concerned about their impact on stakeholders and society, and protect and promote the interests of stakeholders.

*Integrity (4 items).* The extent to which ethical leaders keep promises and behave in a consistent manner, and can be trusted or believed.

#### *c) Administration of the ELWQ*

The ELW is a self-administered questionnaire and takes about 15 to 20 minutes to complete. Clear instructions for its completion are provided. The items are structured in a statement format, with a five-point Likert-type rating scale for each statement. Respondents rate the statements on the basis of perceiving their ethical leaders' behaviour. The scores for fairness, power-sharing, role clarification, people orientation, ethical guidance, concern for sustainability, and integrity are then added together to compute a total, overall score for the construct of ELWQ (Kalshoven et al., 2011).

#### *d) Interpretation of the ELWQ*

Each subscale (fairness, power-sharing, role clarification, people orientation, ethical guidance, concern for sustainability, and integrity) is measured separately and reflects the participants' perceptions of ethical leader behaviour and these dimensions. Thus, it is possible to determine which dimensions are perceived to be true for the respondent and which are not. The higher the score, the truer the statement is for the respondent. The responses are measured according to a five-point Likert-type scale, in which 1= strongly disagree and 5= strongly agree.

e) *Reliability and validity of the ELWQ*

Research findings on the internal consistency of this questionnaire indicate that it is a reliable instrument for measuring ethical leader behaviour (Kalshoven et al., 2011). An exploratory factor analysis indicated that the ELWQ items not only satisfied the psychometric criteria of both convergent and discriminate validity, but also that the content was appropriate to the theoretical constructs that were considered (Kalshoven et al., 2011). A study conducted by Kalshoven et al. (2011) showed that the Cronbach's Alpha for each subscale ranged from .84 to .94. Research by Kalshoven and Den Hartog (2009) indicated that the Cronbach's Alpha internal consistency coefficient for each subscale ranged from .74 to .83.

f) *Motivation for using the ELWQ*

The ELWQ (Kalshoven et al., 2011) was chosen for this study because of the conceptual congruence with the explication of the construct of ethical leadership and its high degree of validity and reliability.

## **6.2.2 Psychometric properties of the measures of the job retention and performance**

The sections below discuss the rationale for and purpose, as well as its dimensions, administration, interpretation, validity, reliability, and motivation for choosing the measuring instrument are presented.

### **6.2.2.1 The Utrecht Work Engagement Scale (UWES)**

a) *Rationale for and purpose of the UWES*

The UWES (Schaufeli, Bakker & Salanova, 2006) is a self-rating measure, consisting of vigour, dedication and absorption. This measuring instrument is used to determine individuals' level of work engagement. Work engagement is regarded as being distinct from other established constructs such as job satisfaction, organisational commitment, and OCB.

### *b) Dimensions of the UWES*

The UWES questionnaire consists of 9 items. The UWES is divided into three subscales (vigour, dedication, and absorption). The vigour subscale consists of 3 items; the dedication subscale of 3 items; and the absorption subscale also of 3 items. The following is a detailed description of the seven dimensions.

*Vigour (3 items)*. The levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence in the face of difficulties.

*Dedication (3 items)*. A sense of significance, enthusiasm, inspiration, pride, and challenge.

*Absorption (3 items)*. Being fully concentrated and deeply engrossed in ones' work, and characterised by time passing quickly, and difficulty in detaching oneself from one's work.

### *c) Administration of the UWES*

The UWES is a self-administered questionnaire, which can be administered in groups or individually, and is easy for respondents to complete. It takes approximately 15 to 20 minutes to complete and has no time limit. The items are structured in a statement format, with a six-point Likert-type rating scale for each statement. The total score is based on the sum of the three independent subscales (vigour, dedication and absorption) (Schaufeli et al., 2006). The scores for these three dimensions are also combined in order to obtain an overall score for the UWES construct, according to Schaufeli and Bakker (2003).

### *d) Interpretation of the UWES*

Each subscale (vigour, dedication and absorption) is measured separately and reflects the participants' level of engagement. It is therefore possible to determine which dimensions are perceived to be true for the respondent and which are not. The higher the score, the higher the level of engagement an individual experiences on the job. The responses are measured on a scale from 0 (never) to 5 (every day).

e) *Reliability and validity of the UWES*

Research findings on the reliability of this questionnaire indicate that it is a reliable instrument for measuring employees' level of engagement (Schaufeli et al., 2003). The validity of the construct was confirmed by Schaufeli et al. (2006) in a Netherlands context. A study conducted by Storm and Rothmann (2003) reported the internal consistency, factorial validity, structural equivalence and bias of the UWES in South Africa, and supported a three factor model of work engagement. Research by Schaufeli et al. (2006) showed that the Cronbach's Alpha for each subscale ranged from .81 to .85 for vigour, from .83 to .87 for dedication, and from .75 to .83 for absorption.

f) *Motivation for using the UWES*

The UWES (Schaufeli et al., 2003) was chosen for this study because of the conceptual congruence with the explication of the construct of work engagement and its high degree of validity and reliability.

6.2.2.2 *The Job Satisfaction Questionnaire (JSQ)*

a) *Rationale for and purpose of the JSQ*

The JSQ (Vitell & Davis, 1990) is a self-rating measure, consisting of pay, promotion, co-worker, supervisor, and work itself. This measuring instrument is used to determine individuals' level of job satisfaction.

b) *Dimensions of the JSQ*

The questionnaire consists of 25 items and measures five dimensions of job satisfaction, namely pay, promotion, co-worker, supervisor, and work itself. Each of these dimensions has a number of items or structured questions which are used to measure it. The following is a detailed description of the five dimensions.

*Satisfaction with pay (5 items).* The extent to which an employee is satisfied with the pay applied in the organisation.

*Satisfaction with promotion (5 items).* The extent to which an individual is satisfied with opportunities for promotion.

*Satisfaction with co-worker (5 items).* The extent to which an individual is satisfied with his or her relationships with co-workers.

*Satisfaction with supervisor (5 items).* The degree to which, an employee is satisfied with the support from his or her supervisor.

*Satisfaction with work itself (5 items).* The extent to which an individual is satisfied with his or her work.

*c) Administration of the JSQ*

The JSQ is a self-administered questionnaire and takes about 10 to 15 minutes to complete. Clear instructions for completion are provided. The items are structured in a statement format, with a five-point Likert-type rating scale for each statement. Respondents rate statements on the basis of their self-perceived satisfaction. The scores for satisfaction with pay, promotion, co-worker, supervisor, and work itself are added together to compute a total, overall score for the construct of JSQ (Lock, 1976; Vitell & Davis, 1990).

*d) Interpretation of the JSQ*

Each subscale (pay, promotion, co-worker, supervisor and work itself) is measured separately and reflects the participants' level of job satisfaction on these dimensions. It is therefore possible to determine which dimensions are perceived to be true for the participants and which are not. The higher the score, the truer the statement is for the respondent. The responses are measured on a scale from 1 (strongly disagree) to 5 (strongly agree).

*e) Reliability and validity of the JSQ*

Research findings on the reliability of the questionnaire indicate that it is a reliable instrument for measuring employees' job satisfaction (Vitell et al., 1990). An exploratory factor analysis indicated that the JSQ items not only satisfied the psychometric criteria of both convergent and discriminate validity, but also that the content was appropriate to the theoretical

constructs that were considered (Vitell et al., 1990). A study conducted by Vitell et al. (1990) indicated that the Cronbach's Alpha internal consistency coefficient for each subscale ranged from .76 to .88, and .89 for the total job satisfaction.

*f) Motivation for using the JSQ*

The JSQ (Vitell et al., 1990) was chosen for this study because of the conceptual congruence with the explication of the construct of job satisfaction and its high degree of validity and reliability.

*6.2.2.3 The Organisational Commitment Scale (OCS)*

*a) Rationale for and purpose of the OCS*

The OCS (Meyer & Allen, 1997) is described as a self-rating measure, consisting of three-dimensional constructs, namely affective, continuance and normative commitment. The instrument was designed to measure employees' levels of commitment (Meyer & Allen, 1997).

*b) Dimensions of the OCS*

The OCS consists of 24 structured statements or items measuring affective, continuance and normative commitment as elements of organisational commitment (Meyer et al., 1997). The scale comprises 24 structured questions and each dimension has a number of items to measure it. The following is a detailed description of the three dimensions.

*Affective commitment (8 items).* The extent of employees' emotional attachment to, identification with and involvement in the organisation. Affective commitment means that individuals decide to stay in the organisation because they want to (Meyer et al., 1997).

*Continuance commitment (8 items).* Individuals' commitment to the organisation based on the costs associated with leaving it. This means that individuals who decide to stay in the organisation based on continuance commitment remain as employees of the organisation because they need to (Meyer et al., 1997).

*Normative commitment (8 items).* The extent to which an individual remains with an organisation because of a sense of obligation. This means that individuals may decide to remain with the organisation because they think that it is morally right to continue to participate in the same organisation (Meyer et al., 1997).

c) *Administration of the OCS*

The OCS is a self-administered questionnaire and takes about 15 to 20 minutes to complete, although there is no time limit. Clear instructions for its completion are provided. The items are structured in a clear Likert statement format, with a rating scale being used for each statement. Respondents rate statements on the basis of their self-perceived organisational commitment. The scores for affective, continuance and normative commitment are then added together to compute a total, overall score for the construct of OCS (Meyer et al., 1997).

d) *Interpretation of the OCS*

Each subscale (affective, continuance, and normative commitment) is measured separately and reflects the participants' level of commitment on these dimensions. It is therefore possible to determine which dimensions are perceived to be true for the participant and which are not. The higher the score, the truer the statement is for the respondent. The responses are measured on a scale ranging from 1 (strongly disagree) to 5 (strongly agree).

e) *Reliability and validity of the OCS*

Previous studies indicated substantial support for the reliability and validity of the affective, continuance and normative commitment scales. Meyer and Allen (1997) reported an internal consistency Cronbach's Alpha ranging from .85 for affective commitment, .79 for continuance commitment and .73 for normative commitment. The total organisational commitment has a reliability of .70 (Meyer & Allen, 1997).

f) *Motivation for using the OCS*

The OCS (Meyer & Allen, 1997) was chosen for this study because of the conceptual congruence with the explication of the construct of organisational commitment and its high degree of validity and reliability.

#### 6.2.2.4 *The Organisational Citizenship Behaviour Scale (OCBS)*

##### *a) Rationale for and purpose of the OCBS*

OCBS (Organ, Podsakoff, & MacKenzi, 2006) is a self-rating measure, consisting of five-dimensional constructs, namely altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. The instrument was designed to measure employees' willingness to put in extra effort to help the organisation (Organ et al., 2006).

##### *b) Dimensions of the OCB*

The OCBS consists of 20 structured statements or items measuring altruism, conscientiousness, sportsmanship, courtesy, and civic virtue as dimensions of OCB (Organ et al., 2006). The scale comprises 20 structured questions and each dimension has a number of items which are used to measure it. The following is a detailed description of the three dimensions.

*Altruism OCBS (5).* The extent to which an individual employee provides assistance to an individual with a particular problem to complete his or her task under unusual circumstances.

*Conscientiousness OCBS (5).* Individuals' behaviour that goes beyond the minimum required or expected level.

*Sportsmanship OCBS (5).* The extent to which an individual tolerates an inconvenient situation without complaining.

*Courtesy OCBS (5).* The extent to which an individual behaviour helps to prevent problems in advance.

*Civic virtue OCBS (4).* The behaviour involving participation in overall organisational issues, such as discussing issues related to an organisation.

##### *c) Administration of the OCBS*

The OCBS is a self-administered questionnaire and takes about 15 to 20 minutes to complete. Even though there is no time limit, clear instructions for its completion are provided. The items are structured in Likert format, with a rating scale for each statement.

Respondents rate statements on the basis of their self-perceived organisational commitment. The scores for altruism, conscientiousness, sportsmanship, courtesy, and civic virtue are then added together to compute a total, overall score for the construct of OCBS (Organ et al., 2006).

*d) Interpretation of the OCBS*

Each subscale (altruism, conscientiousness, sportsmanship, courtesy and civic virtue) is measured separately and reflects the participants' level of OCB on these dimensions. Therefore, it is possible to determine which dimensions are perceived to be true for the participant and which are not. The higher the score, the truer the statement is for the respondent. The responses are measured on a scale from 1 (strongly disagree) to 5 (strongly agree).

*e) Reliability and validity of the OCBS*

Research findings on the reliability of the questionnaire indicate that it is a reliable instrument for measuring an employee's extra-role behaviour (Organ et al., 2006). An exploratory factor analysis indicated that the OCBS items not only satisfied the psychometric criteria of content validity, convergent and discriminate validity, but also that the content was appropriate to the theoretical constructs that were considered (Lo & Ramayah, 2009). A study conducted by Lo et al. (2009) indicated that the Cronbach's Alpha internal consistency coefficient for each subscale ranged from .84 for civic virtue, .74, conscientiousness, .85 for altruism and .76 for courtesy. Podsakoff, MacKenzi, Moorman and Fetter (1990) reported an average internal consistency reliability of .81 for altruism, .85 for courtesy, .85 for sportsmanship, .82 for conscientiousness, and .70 for civic virtue.

*f) Motivation for using the OCBS*

The OCBS (Organ et al., 2006) was chosen for this study because of the conceptual congruence with the explication of the construct of OCBS and its high degree of validity and reliability.

### **6.2.3 Psychometric properties of the biographical instrument**

The biographical instrument is regarded as a self-rating measure consisting of age, gender, educational level and job tenure. This instrument was designed in order to obtain overall personnel characteristics from employees' personnel records. The motivation to include the biographical information was based on the theoretical review of variables that might moderate the relationship between variables under study.

### **6.2.4 Limitations of the psychometric battery**

Self-reporting instruments have several disadvantages. According to Berry, Carpenter and Barratt (2012), self-reports focus on individuals' verbalisations of their feelings towards themselves or others. Individuals may find it difficult to reveal aspects of or feelings about themselves. The self-perception method is also associated with potential problems concerning validity, and may bear little relationship to reality as perceived by the respondents or others. Another disadvantage of self-reports is the eventual probability of faking and not providing the level of detail or use of the concepts in which the researcher is interested (Weathington, Cunningham & Pittenger, 2010). When utilising self-perception measures, the results might be biased because of the tendency of respondents to be dishonest and their ability to respond to certain constructs. In addition, the nature of the instruments may eventually present limitations in terms of the nature of the methods used to determine their validity and compare them with other instruments (Tredoux et al., 2013).

The seven instruments, namely the CEV, ECQ, EWLQ, UWES, JSQ, OCS and OCBS, were selected after an in-depth review of several instruments designed to measure the ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) and job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB). The motivation for selecting these instruments was the ability to use statistical correlation analysis to determine the level of the relationship between the constellations of variables used in this study. However, the limitations of the seven instruments should be considered during the interpretation of the results emanating from the findings.

## **6.3 ADMINISTRATION OF THE PSYCHOMETRIC BATTERY**

According to Watkins, Lei and Canivez (2007), data collection provides the reader with insight into "how" data is collected and subsequently analysed. The researcher applied for

ethical clearance from both the University Research Committee at the University of South Africa, and the Human Resource Director from the Transport organisation involved in this study.

The translation of the Corporate Ethical Virtue, Ethical Climate Questionnaire, Ethical leadership Work Questionnaire, and Utrecht Work engagement, Job Satisfaction Questionnaire, Organisational Commitment Scale and Organisational Citizenship Questionnaire from French into English, and translation back from English into French, were done by linguistics experts from the University of Pretoria. The eight instruments (as discussed above) were compiled in a booklet. The booklet also contained an introduction to the project, evidence of the organisation's permission to conduct the research and a form of informed consent to be signed by each participant. Twenty research assistants (Honours students) were trained by a volunteering professor in the Department of Management at the Protestant University of Congo in Kinshasa. Their participation meant that they distributed the booklets to all of the 1300 employees by hand, inviting them to participate in the study. The data gathering was carried out between March and November 2013. The research assistants collected the completed booklets and the volunteering professor handed them back to the researcher.

#### **6.4 SCORING OF THE PSYCHOMETRIC BATTERY**

Responses to each of the instrument measures were firstly captured from the hard copies to a Microsoft Excel spreadsheet, where each row was a participant and each column was a question. The completed questionnaires were computed by an independent statistician. All data were imported and analysed using statistical methods, specifically utilising the statistical programmes SPSS (Statistical Package for Social Sciences) Version 21.0 for the Microsoft Windows platform (SPSS Inc., 2013), and Amos 21 (Arbuckle, 1995 - 2012).

#### **6.5 STATISTICAL PROCESSING OF THE DATA**

The objective of quantitative research is to assure valid inferences from the available data obtained from a large population in order to generalise (Tredoux et al., 2013). However, it cannot be expected that a non-probability convenience sample will yield values from a population because of the lack of sample representation (Weathington et al., 2010). For this reason statistical techniques and methods were developed in a way to determine the confidence with which inferences can be drawn. The commonly statistical inferences used

are: (1) estimation using confidence intervals and (2), the null hypotheses testing. The present study will make use of the latter (null hypothesis testing) in order to test the hypotheses that will be outlined in Table.6.6.

The statistical analysis was carried out with the help of the Statistical Package for Social Sciences (SPSS) computer program for Windows version 22 (2014), Statistical Advanced Software (SAS) computer for windows version 9.2 (2010) and Rasch IRT Analysis (Bond & Fox, 2013). The statistical analyses consist of three phases, each with different steps of statistical analysis: descriptive statistical analyses, correlational analyses, and inferential (multivariate) statistical analyses. Figure 6.5 below outlined the data analysis process.

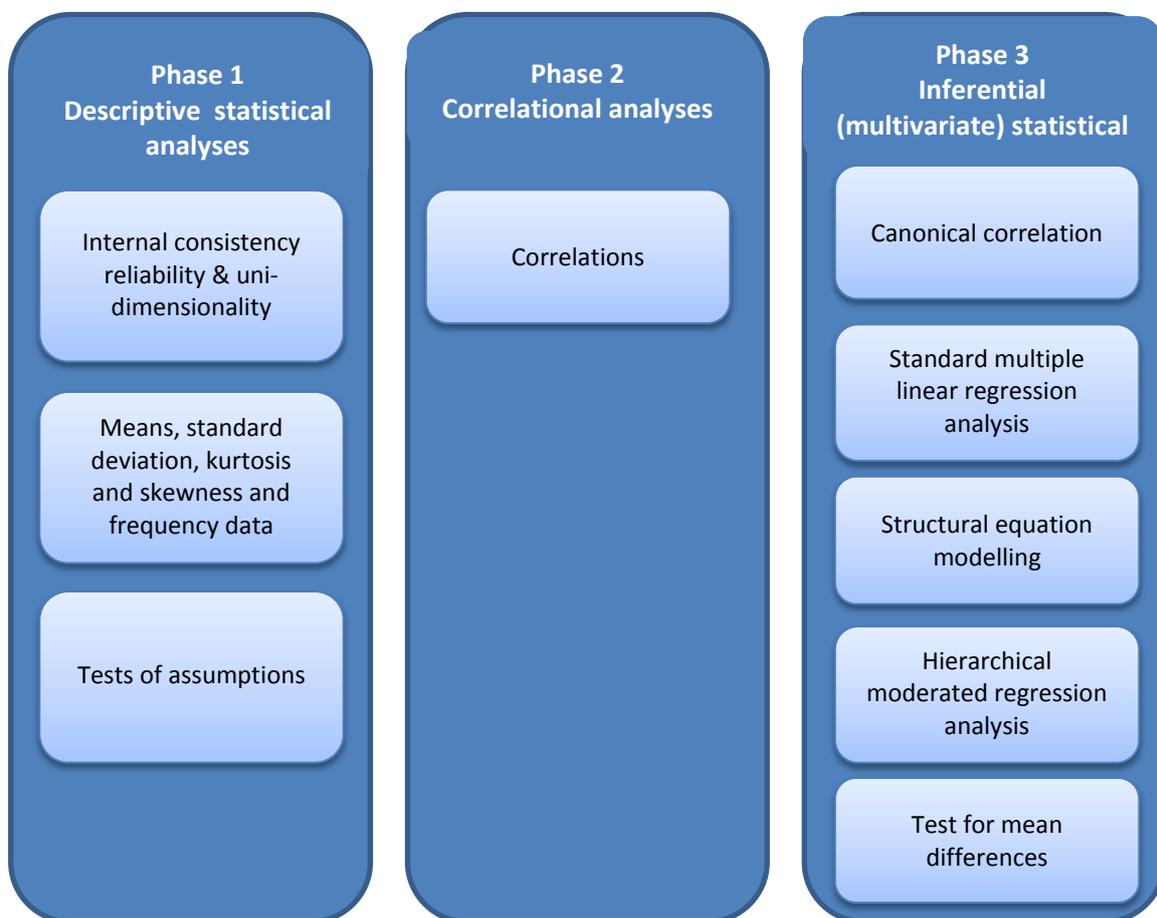


Figure 6.5. Data analysis process.

### 6.5.1 Descriptive statistical analysis

Descriptive statistics are used to show or summarise data in a meaningful way (Tredoux et al., 2013). Descriptive statistics describe the characteristics of the sample in the form of numerical data in the selected constructs, as well as socio-demographic variables.

This stage consists of four steps:

- 1) Determining the internal consistency reliability of the measuring instruments by means of Cronbach's Alpha coefficient;
- 2) Assessing the uni-dimensionality of the CEV, ECQ, ELWQ, UWES, JSQ, OCS and OCBS by using Rasch IRT analysis;
- 3) Determining the means and standard deviations, kurtosis and skewness of the categorical and frequency data by using; and
- 4) Testing assumptions (correlational analysis, canonical correlation analysis, multiple regression analysis, hierarchical moderated regression analysis and test for significant mean differences) by using both SPSS and SAS.

#### 6.5.1.1 *Internal consistency reliability*

The reliability of an instrument can be perceived as an internal consistency or stability of test or measure scores (Dunn, Baguley & Brunsten, 2014). Reliability is the internal consistency with which each item in a scale correlates with each other item, ensuring that a test measures the same thing over time (Tredoux et al., 2013). According to Dunn et al. (2014), a range between .80 and .95 would indicate a desirable and reliable coefficient, particularly for individual measures. Nunnally and Bernstein (2010) indicate that a range between .70 to .80 is desirable. However, Cohen et al. (2011) add that even reliability coefficients as low as .60 and .50 can be regarded as acceptable for broad group measures. The Cronbach's Alpha coefficient was used in this study to determine the internal consistency reliability of the seven instruments. The Cronbach's's Alpha coefficients range from 0, which mean that there is no internal consistency, to 1, which is indicative of maximum internal consistency (Cohen et al., 2011). This means that the higher the alpha, the more reliable the instrument will be.

#### 6.5.1.2 *Rasch analysis: assessing uni-dimensionality*

Rasch IRT analysis was used to assess the uni-dimensionality of the numerous scales by calculating the infit and outfit chi-square statistics, in order to obtain an indication of how well the items measured the underlying constructs (Bond & Fox, 2007; Zaporozhets, Fox, Bettyukova, Laux, Piazza & Salyers, 2015). The item and person and reliability indices determine the reliability of the rating scale (Brand-Labuschagne, Mostert, Rothmann & Rothmann, 2012). The person separation reliability is similar to the traditional internal consistency reliability in terms of Cronbach's alpha coefficients, which estimate the true

person variance (Bond et al., 2007). The item reliability shows how well difficulty levels of the item are dispersed among the measurement latent variables and evaluates the chance of replicating the item placement in other samples (Bond et al., 2007, Brand-Labuschagne et al., 2012).

The fit statistics assess the validity of each dimension, while item fit mean square statistics are used to assess the uni-dimensionality of the scales (Bond & Fox, 2013). The infit and outfit statistics are used to measure the fit of the data (Brand-Labuschagne et al., 2012). Rasch analysis is an item-based approach where ordinal observed item scores are transformed to linear measures representing the underlying latent construct (Bond et al., 2013). The Rasch analysis is based on a mathematical model where the probability for endorsing an item is a logistic function of the difference between the person's ability and the item's difficulty (Brand-Labuschagne et al., 2012). Rasch analysis was used in this study to evaluate the internal consistency and construct validity of the seven measuring instruments.

#### *6.5.1.3 Means and standard deviations, kurtosis and skewness, and frequency data*

The means and standard deviations for all dimensions of the ethical behaviour of organisations (ethical culture, ethical climate and ethical leadership) and work engagement and related variables (job satisfaction, organisational commitment and OCB) were determined in the empirical study (Cohen et al., 2011). The mean (M) is perceived as the sum of scores divided by the number of scores across the distribution (Cohen et al., 2011; Treiman, 2014). The intended mean is used to compute the score averages that are obtained in the different dimensions of the instruments (Cohen et al., 2011). According to Tredoux et al. (2013), standard deviations (SD) and minimum and maximum values are used to describe the results. Standard deviation is perceived as the positive square root of variance that measures the average of the deviations of each score from the mean, and measures the average distance of all of the scores in the distribution from the mean or central point of the distribution (Treiman, 2014).

Furthermore, skewness and kurtosis were used. Skewness refers to a measure of symmetry or lack of symmetry. A set of data is categorised as symmetrical if its centremost point is lying in the middle of the distribution, and the distribution of scores to the left and the right of the centermost point are mirror images of each other (Treiman, 2014). Asymmetrical distribution may be positively or negatively skewed. The distribution is positively skewed if the majority of the sample scores are in the lower range of the variable. On the other hand, it

is negatively skewed if the majority of the scores are in the upper range of the variable (Tredoux et al., 2013). Kurtosis refers to a measure of whether the data is peaked or flat in relation to a normal distribution. Skewness and kurtosis values ranging between the -1 and +1 normal range are recommended for conducting parametric tests (Cohen et al., 2011). Frequency tables are also used to describe the distribution scores for the socio-demographic variables. The main reason is that the biographical questions are categorical in nature, and responses are therefore presented by means of frequency distribution (Cohen et al., 2011).

#### 6.5.1.4 *Tests for assumptions*

Essentially, the objective of any research is to make valid inferences from a sample of data from the population. Nevertheless, the random samples from a larger population may or not provide exact values that are applicable to the whole population (Cohen et al., 2011). For the purpose of this study, statistical methods are used to make it possible to determine the level of confidence with which such inferences can easily be made. Cohen et al. (2011) suggest six assumptions that researchers may use to determine the confidence level and make valid inferences. The following assumptions underlying multivariate procedures and tests for significant mean differences are addressed in this study:

- The accuracy of data entered into the data file and missing values;
- The ratio of cases to independent variables;
- The outliers (univariate and multivariate);
- Normality, linearity and homoscedasticity;
- Multicollinearity and singularity; and
- Levene's test of equality of variance.

##### *a) The accuracy of data entered into the data file and missing values*

To ensure the accuracy of the data, screening was conducted for possible miscoding. Frequency statistics for each items were requested (SPSS 22, frequency procedure) and these were inspected with the minimum and maximum values, along with means and standard deviations. The minimum and maximum values of each variable should be checked to ensure that all values in each variable are valid (Cohen et al., 2011). A variable that is measured according to five-point Likert-type scales should not have a value of 6 or 7 and more (Cohen et al., 2011). Ignoring such a process can definitively affect the predictive power of any analysis outcome, which is why it is emphasised that, in order to achieve

consistency and accuracy in any analysis, data screening is one of the key processes to be given special attention (Hartas, 2015; Tabachnick & Fidell, 2013).

If the researcher finds that there are a lot of missing values in the same specific variables, a decision can be made to exclude those variables from the analyses (Warner, 2008). If the missing values for several cases occur with different variables, then it is probable that these cases will not be excluded, because of the necessary information that may be lost (Pallant, 2010). A mean value can also be calculated for each variable with a lot of missing values by means of the SPSS. According to MacGrant (2014), the t-test can also be calculated for each variable with a lot of missing values by distinguishing groups (i.e. the group with missing values versus the group without missing values). This should be kept in mind when interpreting findings, in order to ensure that there are no over-generalisations (MacGrath, 2014). In this study, the missing data were ignorable (Hair et al., 2010).

*b) The ratio of cases to independent variables*

The determination of a sample size is important for the achievement of an adequate statistical power (Cohen et al., 2011). It is commonly required, before determining an adequate sample size for the testing of a multiple correlation coefficient, to use the formula of  $N \geq 50 + 8m$  (where  $m$  is the number of independent variables). In this formula, the standard conventional alpha level and medium-sized relationships between the independent and dependent variable were assumed ( $p = .05$  and  $\beta = .20$ ), and based on the above formula, the required sample is  $N = 74$ . The sample size of  $N = 839$  obtained in this study was considered to be satisfactory for achieving an adequate statistical power for identifying the effects by means of the correlation and regression analyses to be performed.

*c) Outliers (univariate and multivariate)*

An outlier is perceived as a case with an extreme value on one variable (univariate) or such an extraordinary combination of scores on two or more variables (multivariate) that it unjustifiably influences the statistics (Hair et al., 2010). An outlier is an observation that seems to deviate markedly from other observations in the distribution. It is defined as a value that has a standard deviation that is three times above or below the mean (Cohen et al 2011; MacGrant, 2014). An outlier can have a dramatic effect on the correlation coefficient, particularly in small samples. In other circumstances, outliers can make the  $r$  value much higher than it should be, and may also result in an underestimation of the true relationship

(Pallant, 2010). In this study, outliers were detected by carefully examining the values that are sitting out on their own in the scatterplots.

*d) Normality, linearity and homoscedasticity*

A test for normality can be performed to determine whether or not the data set is well modelled by the normal distribution (Cohen et al., 2011). According to Hair et al. (2010), multivariate normality refers to the assumption that each variable (and all linear combination of the variables) is normally distributed. In this case, the Kolmogorov-Smirnov could be used to test for the equality of continuous, one-dimensional probability distribution that can be used to compare a sample with a reference probability (Tabachnick & Fidell, 2013).

Cohen et al. (2011) indicate that the Kolmogorov-Smirnov test quantifies the distance between the empirical distribution function of the sample and the cumulative distribution function of the reference distribution, or among empirical distribution and two samples. The assumption from the null hypothesis is that the samples are drawn from the same distribution (in a two-sample case) or that the sample is drawn from the reference distribution (in a one-sample case). In this case, the distributions measured under the null hypothesis are continuous but otherwise unrestricted (Tabachnick & Fidell, 2013).

The Kolmogorov-Smirnov test is considered to be the most commonly used nonparametric method for comparing two samples. This test is sensitive to differences in both the location and shape of the empirical cumulative distribution functions of the two samples (Cohen et al., 2011).

The multivariate analysis requires other assumptions when testing linearity or homoscedasticity (Hair et al., 2010). When testing the linearity, the assumption is that the relationship between metric variables is linear: in other words, the straight line relationship between variables is fitted to the X and Y values on the bivariate scatterplot (Hair et al., 2010). This assumption was tested in this study by visually scrutinising bivariate scatterplots. A stronger linear relationship is indicated when data points that are created outline an ellipse, where the longer axis slopes upwards from left to right (Tabachnick & Fidell, 2013).

The assumption of homoscedasticity for ungrouped data assumes that the variability of scores for one continuous variable is more or less the same at all values of another continuous variable. This assumption is closely related to the assumption of normality, in that

when the normality assumption is met, the relationship between variables can be seen as homoscedastic (Hair et al., 2010; Tabachnick & Fidell, 2013). The assumption of homoscedasticity occurs when the variance of the error terms ( $e$ ) appears to be constant over a range of predictor variables, and the data is said to be homoscedastic. This assumption is also perceived as an assumption of equal variance of the population error  $E$  (where  $E$  is estimated from  $e$ ), which is critical to the proper application of many multivariate techniques (Tabachnick et al., 2013). According to Tabachnick et al. (2013), the homoscedasticity assumption is based on the fact that the residuals are approximately equal for all predicted dependent scores, or the variability in scores for the independent variables is the same at all values of the dependent variables. Homoscedasticity is frequently seen through a cluster of points that is wider as the values for the predicted dependent variable become larger (Tabachnick et al., 2013).

*e) Multicollinearity and singularity*

Multicollinearity refers to the relationship among the independent variables. It occurs when the independent variables are highly correlated ( $r = .90$  and above). The presence of such high correlations indicates that the independent variables do not hold any additional information needed in the analysis (Cohen et al., 2011), whereas singularity occurs when one independent variable is actually a combination of other independent variables (i.e. when both subscale scores and the total score of a scale are included) (Cohen et al., 2011; Pallant, 2010). Multicollinearity has been determined between the independent variables in this study using Pearson's correlation. Pearson correlation was used to examine the correlation coefficient between the variables. This was conducted before hypothesis testing, with the aim of determining the extent to which the variables were related (Hair et al., 2010). The values of Pearson's correlation that were  $.90$  and above were considered to be problematic.

Cohen et al. (2011) and Pallant (2010) proposed that when two independent variables are highly correlated, the researcher should consider omitting one variable or forming a composite variable from the scores of the two highly correlated variables. The study made use of tolerance, VIF (variance inflation factor) eigen-values and condition indices, in order to test the multicollinearity and singularity assumption. The rule of thumb for VIF above 10 and tolerance values that are less than  $.10$  indicate a potential multicollinearity problem (Hair et al., 2010).

f) *Levene's test of equality of variance.*

Levene's (1960) test is used to check if samples have equal variances across subgroups on non-parametric variables; these variances across samples are known as homogeneity of variance. Statistical tests such as analysis of variance assume that variances are equal across the normally or non-normally distributed data (Cohen et al., 2011). Levene's test can be used to verify that assumption. According to Pallant (2010), if Levene's test is significant ( $p \leq .05$ ), the two variances are significantly different. If it is not significant ( $p \geq .05$ ), it means that the two variances are not significantly different, and they are therefore considered to be approximately equal (Pallant, 2010). This study made use of the non-parametric Levene's test, as the data was non-parametric.

### **6.5.2 Correlational analyses**

Correlation statistics test the direction of the strength of the relationship between two or more variables, and the strength of this relationship is represented by a correlation coefficient (Tredoux et al., 2013). Pearson product moment ( $r$ ) is typically used to describe the strength of the linear relationship between the ethical context and behaviour, conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Pearson ( $r$ ) correlation has values that range from -1.00 to +1.00. The sign of  $r$  provides information about the direction of the relationship between variables. A positive correlation of +1.00 indicates that as scores for the dependent (X) variable increase, scores for the independent (Y) variable also tend to increase. A negative correlation of -1.00 indicates that as scores for the dependent (X) variable increase, scores for the independent (Y) variable tend to decrease (Cohen et al., 2011). In this study, the Pearson-product moment coefficient was used to test for the statistically significant interrelationship between the ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) and the job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB, with specific reference to the positive or negative relationship that exists between the scores of CEV, ECQ, ELWQ, UWES, JSQ, OCS and OCBS. This will help to test hypothesis 1.

### **6.5.3 Inferential and multivariate statistical analysis**

Inferential statistics were performed to permit the researcher to make inferences about the data. Inferential statistics are used to reach conclusions that are beyond the direct data, which entails making inferences from the data obtained to more broad-spectrum conditions (Cohen et al., 2011).

The inferential multivariate statistics consisted of five steps, namely:

- 1) Conducting canonical correlation analysis to empirically investigate the overall statistical relationship between the ethical context and behaviour, conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB, in order to test hypothesis 2.
- 2) Conducting standard multiple regression analysis to empirically investigate whether the ethical context and behaviour construct, conceptualised as ethical culture, ethical climate and ethical leadership, positively and significantly predict the job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB, in order to test hypothesis 3.
- 3) Conducting structural equation modelling (SEM) to determine the elements of the empirically manifested structural model and assess the fit between the empirically manifested structural model and the canonical measurement model, in order to test hypothesis 4.
- 4) Performing hierarchical moderated regression analysis to empirically investigate whether the demographic variables (age, gender, educational level and tenure) significantly moderate the relationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB in order to test hypothesis 5.
- 5) Conducting tests for significant mean differences to empirically investigate whether significant differences exist between the demographic variables that act as significant

moderators between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as manifested in the sample of respondents, in order to test hypothesis 6.

#### 6.5.3.1 *Canonical correlation analysis*

Canonical correlation analysis is a multivariate statistical model that is viewed as an extension of multiple regression analysis (Hair et al., 2010). Canonical correlation is used in order to facilitate the study of overall interrelationships among a set of multiple dependent variables and multiple independent variables (Hair et al., 2010). Thus, it develops a number of independent canonical functions that maximise the correlation between the linear composites, also called canonical variates, which are a set of dependent and independent variables. According to Breitung and Pigorsch (2013), each canonical function is based on the correlation between two canonical variates ( $R_c$ ), which implies that one variate is for the dependent variables, while the other one is for the independent variables. Canonical correlation is important in that its variates are derived with the objective of maximising their correlation. Canonical correlation analysis is perceived as the most generalised member of the family of multivariate statistical techniques, which is directly related to many of the dependence methods. Linked to regression, canonical correlation's goal is to quantify the strength of the relationship between the two sets of variables (independent and dependent) (Hair et al., 2010).

Canonical correlation analysis is linked to the principal components analysis and factor analysis in the creation of the optimum structure or dimensionality of each variable set, which maximises the relationship between independent and dependent variable sets. The aim of principal components analysis and factor analysis is to explain the linear relationship between a set of observed variables and an unknown number of factors. Like principal component analysis, canonical correlation looks for interesting linear relationships in a combination of multivariate observations (Hair et al., 2010).

In this study, canonical correlations were used to determine the relationships between two multivariate data sets. Canonical correlation was considered to be appropriate and useful for this study because the statistical analyses involved investigating the strength of the relationship between two composite sets of independent and dependent variables.

Canonical correlation analysis offers several advantages for researchers. Firstly, it limits the probability of committing Type I errors. The risk of a Type I error relates to the likelihood of finding a statistically significant result when it does not exist. An increased risk of Type I error occurs when the same variable in a data set is used for too many statistical tests. Canonical correlation analysis can determine the relationship between the two sets of variables (independent and dependent) in a single relationship, rather than using separate relationships for each dependent variable. Secondly, canonical correlation analysis may better reflect the reality of research studies. Difficult research that involves human and/or organisational behaviour may suggest multiple variables that represent a concept, and this creates problems when the variables are investigated separately. Furthermore, canonical correlation analysis can detect two or more unique relationships, if they exist. Therefore, canonical correlation analysis is aimed at analysing the data involving multiple sets of variables, and is also theoretically consistent with the purpose (Hair et al., 2010).

Because of the instability and variability of canonical weight and multicollinearity (Hair et al., 2010), it is proposed that researchers should consider only the individual canonical structure correlations (loadings) and their squared canonical structure loadings when interpreting relative importance and magnitude of importance (practical significance), in order to derive the two canonical variate constructs: the ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) as the independent canonical variate construct, and the job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) as the dependent canonical variate construct. Hair et al. (2010) indicate that canonical (loading) or canonical structure correlation measures the strength of the canonical relationship between a canonical variate and its individual original variables in the set of variables (within-set variable-to-variate correlation). In this study, variables that correlated highly ( $\geq .30$ ) with the canonical function variate were regarded as having more in common with it.

Research hypothesis 2 was tested by means of canonical correlation analysis, namely that: The ethical context and behaviour constructs variate as a set of composite independent latent variables (ethical culture, ethical climate and ethical leadership) is significantly and positively related to the job retention and performance constructs variate as a composite set of dependent latent variables (work engagement, job satisfaction, organisational commitment and OCB).

### 6.5.3.2 *Standard multiple linear regression analysis*

Multiple regressions were performed in this study in order to determine the proportion of variance that is explained by the independent variables ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership) in the scores of the dependent variables job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB).

According to Cohen et al. (2011), multiple regression analysis is one of the multivariate methods used to investigate the collective contributions of the explanatory (independent variables) to the variance of the explained (dependent variables). The analysis procedure is used to shape models for explaining scores of the dependent variable in relation to the scores of the independent variables (Tredoux et al., 2013). Multiple regression analysis results emphasise two important elements. Firstly, the  $R^2$  values indicate how well the independent variable explains the dependent variable, and secondly, the regression results measure the direction and size (magnitude) of the effect of each variable on a dependent variable (Cohen et al., 2011). By using multiple regression analysis, the researcher should be able to test the models and indicate which set of variables is influencing the job retention and performance (work engagement, job satisfaction, organisational commitment and OCB), by highlighting the direction and size of the effect of the independent variables ethical context and behaviour (ethical culture, ethical climate and ethical leadership) on the dependent variables (Cohen et al., 2011).

Research hypothesis 3 was tested by conducting multiple regression analyses, namely: The ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, positively and significantly predict the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

### 6.5.3.3 *Structural equation modelling (SEM)*

Structural equation modelling (SEM) is perceived as a statistical procedure that tests the theoretical models containing hypothesised sets of variables to define constructs and hypothesised relationships between these constructs (Kline, 2012). SEM as a multivariate uses various types of models to describe the parsimonious summary of the interrelationships

between the observed variables and the basic goal of providing a quantitative test of the theoretical model hypothesised by the researcher (Hair et al., 2010). SEM includes observed variables and latent variables, which may be independent, dependent or moderating. In this study, the latent variables of job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB were hypothesised to be dependent on the independent latent variables of ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership. This basic relationship has been hypothesised to be moderated by the socio-demographic variables of age, gender, educational level and tenure.

SEM as a multivariate procedure that combines multiple regression, path analysis and factor analysis examines a pattern of relationships among a set of variables (Whitley & Kite, 2013). According to Whitley et al. (2013), SEM is divided into two different parts. Firstly, the measurement model that deals with the relationship between the measured and latent variable. Secondly, the structural model that deals with the relationship between the latent variables. For the purpose of this study, the empirically resulting canonical correlation model was presumed to be the measurement model. SEM was used to validate the canonical correlation model. SEM analysis was performed with the objective of validating the relationship among the composite canonical variates (ethical context and behaviour variables and the job retention and performance factors).

SEM is different from other relational modelling such as multiple regression analysis because of its ability to distinguish between the direct and indirect relationships between variables, as well as its ability to analyse the relationship between latent variables without random error (Whitley et al., 2013). SEM as a confirmatory approach hypothesises a model on the basis of theory and empirical evidence from previous research. The SEM process emphasises the validation of the measurement and hypothesised model, by obtaining estimates of the parameters of the model and by determining whether or not the model itself provides a good fit to the data (Garson, 2009; Whitley et al., 2013). Components such as regression models, path models, confirmatory factor models, and reliability and correlation analysis are considered to be essential for the SEM process.

*a) Regression model*

A regression model consists of observed variables, where a single dependent observed variable is predicted or explained by one or more independent observed variables (Hair et al., 2010).

*b) Path model*

A path model is specified with observed variables, but flexibility allows for multiple independent observed variables. A path model tests more complex models than regression models. Garson (2009) indicates that path analysis is a statistical technique used to examine the comparative strength of direct and indirect relationships among variables. Since path analysis assesses the comparative strength of different effects on an outcome, the relationships between variables in the path model are expressed in terms of correlations and represent hypotheses proposed by the researcher (Garson, 2009; Whitley et al., 2013).

*c) Confirmatory factor analysis model*

A confirmatory factor analysis model consists of observed variables which are hypothesised to measure one or more latent variables (independent and/or dependent). Confirmatory factor analysis (CFA) plays a crucial role in SEM, as it may be used to confirm that the indicators sort themselves into factors corresponding to how the researcher has linked the indicators to the latent variable. Confirmatory factor analysis models are used to evaluate the role of measurement error in the model, validate a multifactorial model, and determine group effects on the factors (Hair et al., 2010).

*d) Reliability*

Reliability, known as Cronbach's Alpha, is a frequently used coefficient that tests the extent to which multiple indicators for latent variables belong together. This coefficient varies from 0 to 1.0. The rule of thumb is that good indicators should have a Cronbach's Alpha of .70 and more to be considered reliable (Nunnally & Bernstein, 2010).

#### e) *Correlation analysis*

The Pearson product moment correlation coefficient measures the degree of linear relationship between two variables (Cohen et al., 2011). The emphasis in correlation is placed on the degree to which a linear model may describe the relationship between two variables in terms of direction or strength. According to Cohen et al. (2011), a correlation coefficient may take on any value between 1 and -1, and the closer the coefficient is to either of these points, the stronger the relationship is between variables. A correlation value between 0 and .3 indicates a weak linear relationship; a correlation value between .3 and .7 indicates a moderate linear relationship; while a correlation value of .7 and 1.0 indicates a strong linear relationship (MacGrant, 2014).

SEM has become an important tool that is a widely used and accepted analysis approach in social sciences (Whitley et al., 2013). There are various advantages to using it, namely:

- It has a greater recognition of the validity and reliability of observed scores obtained from measurement instruments. Measurement error has become a huge issue in many disciplines.
- SEM has the ability to take the analysis of complicated and advanced theoretical models into account, which increases the ability to analyse complex theoretical models that include mediations and moderation.
- It allows for more flexible assumptions, as well as the attraction of SEM's graphical modelling interface and the ability to test models with multiple dependents. In addition, SEM helps to compare alternative models in order to determine relative model fit (Garson, 2009; Whitley et al., 2013).
- SEM software programmes are user-friendly (Whitley et al., 2013). Structural equation modelling was performed in this study with the help of AMOS 21 (Arbuckle, 1995-2012).

#### 6.5.3.4 *Hierarchical moderated regression analyses*

Hierarchical moderated regression analyses are used to empirically detect how a variable moderates or influences the nature of a relationship between variables (Hair et al., 2010). A

hierarchical moderated regression analysis enables the relationships between independent and dependent variables to be linked to other independent variables (i.e. moderator). The moderating effect occurs when the level of the third variable (age, gender, educational level and tenure) influences or affects the relationship between the ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership) independent variables and the job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) as dependent variables. Hierarchical moderated regression analyses are important statistical tools, which have been judged to be appropriate for testing interactions. Gaol, Kadry, Taylor and Li (2014) suggest that in order to test moderating effects, hierarchical moderated regression analysis should be used. In this study, hierarchical moderated regression analysis was performed to determine whether or not the socio-demographic variables (age, gender, educational level and tenure) significantly moderate the relationship between the ethical context and behaviour variables and the job retention and performance related-factors.

Research hypothesis 5 was tested by conducting hierarchical moderated regression analyses. This hypothesis states the following: Biographical variables (age, gender, educational level and tenure) do not significantly and positively moderate the relationship between the independent (ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership) and dependent job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

#### 6.5.3.5 *Tests of differences between mean scores*

The Mann-Whitney U test and the Kruskal-Wallis test (for non-parametric data) (Pallant, 2010) were conducted to identify significant differences between gender, age, educational level and tenure that were shown to be the variables that acted as moderators between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. The concept behind the Mann-Whitney U test and the Kruskal-Wallis test is to rank the data for each condition and see how different the two or more groups' rank totals are (Pallant, 2010). If there is a systemic difference between two or more groups' conditions, then most of the high ranks between belong to one condition and the low ranks to other ones. The Mann-Whitney test statistic U refers to differences between two ranks totals while the Kruskal-

Wallis test reflects the differences between more ranks totals (Pallant, 2010). Research hypothesis 6 was tested by conducting the Mann-Whitney U test and the Kruskal-Wallis test.

#### 6.5.4 Level of significance

The level of significance expresses statistical significance in terms of specific probability (Cohen et al., 2011). Hypothetically, the most frequently used statistical level of significance is based on  $p \leq .05$  as a rule of thumb, therefore providing 95% confidence in the results being accepted as standard when applied in other research contexts (Neuman, 2000). In other words, if a researcher observes the relationship to be occurring 95 times out of 100, i.e. 5 per cent of the difference, then he/she could say with some confidence that there seems to be a high degree of association between the variables (Cohen et al., 2011). Nevertheless, the researcher may make two types of errors (Type I and Type II errors). Firstly, a Type I error occurs when the researcher misleadingly rejects a null hypothesis, by stating that a relationship exists when in fact there is no relationship. Secondly, a Type II error occurs when the researcher misleadingly accepts a null hypothesis by stating that a relationship exists, when there is no such relationship between the variables.

Table 6.5  
*Different Levels of Statistical Significance*

Probability	Level	Significance
P	.10	Less significant
P	.01 to .05	Significant
Pp	.001 to .01	Very significant
P	.001	Extremely significant

Tredoux et al. (2013)

##### 6.5.4.1 Statistical significance of Pearson product moment correlations

Pearson product moment correlations will be interpreted according to the guidelines provided by Cohen (1992):

- $r \geq .10$  (small practical effect);
- $r \geq .30$  (medium practical effect); and
- $r \geq .50$  (large practical effect).

The significance level of  $p \leq .05$  and  $r \geq .30$  was chosen as the cut-off point for rejecting the null hypotheses.

#### 6.5.4.2 *Statistical significance of canonical correlation analysis*

In terms of the statistical significance of canonical correlation, the level that is considered to be the minimum that is acceptable for interpretation is  $p \leq .05$ , which (with the  $p \leq .01$  level) has become the generally accepted level for considering a correlation coefficient to be statistically significant. Multivariate tests of all canonical roots are used to assess the significance of discriminant functions, together with Wilks' Lambda, Hotelling's trace, Pillai's trace and Roy's greatest characteristic root (gcr). The significance levels of canonical functions represented by the size of the canonical correlations are considered when deciding which functions to interpret. Usually, the  $R_c$  loading  $\geq .30$  guideline is set and considered as a suitable size for canonical correlations (Hair et al., 2010). Nevertheless, the decision is usually based on the contribution of the results to a better understanding of the research problem being investigated. According to Hair et al. (2010), the redundancy index of the canonical variate (the percentage of variance explained by its own set of variables, multiplied by the squared canonical correlation for the pair of variates) should also be considered when interpreting the practical significance of the canonical results. The higher the redundancy index, the more practically significant the results are (Hair et al., 2010).

#### 6.5.4.3 *Statistical significance of multiple regression correlations*

The statistical significance levels for the multiple regressions used in this study are as follows:

$F(p) \leq .001$ ;

$F(p) \leq .01$ ; and

$F(p) \leq .05$  as the cut-off point for rejecting the null hypotheses.

The adjusted  $R^2 \leq .12$  (small practical effect size);  $R^2 \geq .13 \leq .25$  (moderate practical effect size);  $R^2 \geq .25$  (large practical effect size) will be considered when interpreting the magnitude of the practical significance of the results (Cohen, 1992).

In terms of the hierarchical moderated regression results, the following effect size will be applied (Cohen, 1992):

$$f^2 = (R^2 - R^2_{12})$$

$f^2$  = practical effect size (.02 = small; .15 = moderate; .35 = large).

#### 6.5.4.4 *Statistical level of significance: SEM*

The purpose of SEM is to test the theories and determine the statistical significance of the hypothesised theoretical model that has practical and substantive importance. When analysing the statistical significance and substantive meaning of the hypothesised model, the researcher should consider the following approximate fit indices: the Chi Square ( $\chi^2$ ); Goodness of Fit Index (GFI); Normed Fit Index (NFI); Comparative Fit Index (CFI); Tucker-Lewis Index (TLI); Root Mean Square Error of Approximation (RMSEA); and Standardised Root Mean Square Residual (SRMR) (Geiser, Keller & Lockhart, 2013).

##### a) *Chi Square ( $\chi^2$ )*

The Chi square ( $\chi^2$ ) is a traditional measure used to test the closeness of the fit between the unrestricted sample covariance matrix and restricted covariance matrix (Geiser et al., 2013). Chi square tests the null hypothesis that the covariance matrix and mean vector in the population are equal to the model-implied covariance matrix and mean vector (test of exact model fit). A significant chi-square value leads to the elimination of the null hypothesis that the model fits exactly in the population. The degrees of freedom are calculated as the difference between the number of pieces of available information (variances, covariances and means of the manifested variables) minus the number of estimated model parameters (Geiser et al., 2013). The Chi-square statistic is in essence a statistical significance test, as it is sensitive to the size of the sample, which means that it nearly always rejects the model when large samples are involved (Pallant, 2010). Where smaller samples are used, the chi-square statistic lacks power, and because of this, we may not be able to discriminate between good fitting models and poor fitting models (Cohen et al., 2011). Due to the restrictiveness of the model chi-square, researchers have found alternative indices to assess model fit. One of the statistics that minimises the impact of the sample size on the model is Byrne (2013) and Wheaton, Muthen, Alwin and Summers' (1977) relative/normed chi-square ( $\chi^2/df$ ). According to Hooper et al. (2008), there is no consensus concerning an acceptable ratio for the chi-square. Wheaton et al. (1977) recommend a ratio from as high as 5.0 to as low as 2.0.

*b) Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI)*

The Goodness of Fit Index (GFI) is an absolute fit index that estimates the proportion of covariances in the sample data matrix explained by the model (Kline, 2012). The Goodness of Fit Index is the extent to which the hypothesised model reproduces the covariance structure between the variables in the sample. By observing the variances and covariances accounted for by the model, the Goodness of Fit Index can demonstrate how closely the model comes to replicating the observed covariance matrix. The AGFI differs from the GFI only in the sense that it adjusts for the number of degrees of freedom in the specified model. As such, it also addresses the issue of parsimony by incorporating a penalty for the inclusion of additional parameters. The GFI and AGFI are considered as absolute indices of fit because they basically compare the hypothesised model with no model at all. Both indices range from zero to 1.0, with values close to 1.0 being indicative of a good fit. In addition, AGFI indices tend also to increase along with a larger sample size. It is commonly accepted that values of .90 or greater indicate well-fitting models (Klin, 2012).

*c) Root Mean Square Error of Approximation (RMSEA)*

The Root Mean Square Error of Approximation (RMSEA) is viewed as a badness-of fit index, where a value of zero indicates the best fit. It is also perceived as a parsimony-adjusted index that does not approximate a central chi-square distribution (Klin, 2012). Alternatively, the RMSEA follows a non-centrally chi-square distribution, where the non-centrality parameter allows for discrepancies between model-implied and sample covariances. The cut-off point recommended for RMSEA has been reviewed systematically over the past fifteen years. Up until the early nineties, an RMSEA in the range of .05 to .10 was considered to be an indication of a fair fit whereas values above .10 indicated a poor fit. An RMSEA of .08 to .10 was considered to be a mediocre fit and below .08 a good fit. It is now commonly reported in relation to the RMSEA that in a well-fitting model, the lower limit is closer to .0, while the upper limit should be less than .08. An RMSEA value of .05 and less indicates an exact and close approximation, while values of up to .08 suggest a reasonable fit model in the sample (Geiser et al., 2013). It is commonly believed that there is a good model fit if the RMSEA is less than .05, and an adequate fit if the RMSEA is less than or equal to (about) .08 (Moutinho & Hutvheson, 2011).

One of the advantages of the RMSEA is its ability for allowing the confidence interval to be calculated around its value. This is possible due to the known distribution values of the

statistic and subsequently allows for the hypothesis (poor fit) to be tested more accurately (Klin, 2012). RMSEA attempts to measure the error of approximation in the sample apart from the error of estimation due to sampling errors. The RMSEA is robust under conditions of data non-normality (Klin, 2012).

d) *Root-Mean Square Residual (RMR) and Standardised Root Mean Square Residual (SRMR)*

The RMR and the SRMR are a square root of the difference between the residuals of the sample covariance matrix and hypothesised covariance model (Hooper et al., 2008). Both coefficients of the RMR and SRMR are a standardised measure for the evaluation of the model residuals (sample minus model-implied covariances, and means). The range of the RMR is calculated based upon the scales of each indicator; therefore, if the questionnaire contains items with varying levels, the RMR can become difficult to interpret (Klin, 2012). The Standardised RMR (SRMR) resolves this problem and is therefore more meaningful to interpret. Conventionally, small SRMR values indicate that the observed variance, covariance and means are well reproduced by the model on average (Geiser et al., 2013). Nevertheless, values as high as .08 are deemed acceptable (Hu & Bentler, 1999). SRMR values of below .05 are usually seen as an indication of a good fit (Geiser, 2013).

Incremental fit indices calculate the proportionate improvement in the fit by comparing a target model with a more restricted, nested baseline model. The commonly used incremental fit indices are: Comparative Fit Index (CFI), Normed Fit Index (NFI) and Non-Normed Fit Index (NNFI), and the Turkey Lewis Index (TLI) (Geiser, 2013).

e) *Comparative Fit Index (CFI)*

The Comparative Fit Index (CFI) compares the fit of the target model to the fit of a baseline or independent model, which assumes that the population covariance matrix of the observed variable is a diagonal matrix. This means that the observed variables are allowed to have different variances, but not zero covariance (Geiser et al., 2013). The CFI (Bentler, 1990) is a revised form of the NFI, which takes the sample size that performs well, even when the sample size is small, into consideration (Tabachnick & Fidell, 2013). Like the NFI, this statistic assumes that all latent variables are uncorrelated (null/independence model) and compares the sample covariance matrix with this null model (Hooper, Coughlan & Mullen, 2008). As with the NFI, values of this statistic range from 0.0 to 1.0, with values closer to 1.0

indicating a very good fit. Generally, the CFI should be equal to or greater than (about) .90 in order to accept the model. However, Geiser et al. (2013) and Moutinho and Hutcheson (2011) argue for .95 being the cut-off point.

f) *Normed Fit Index (NFI) and Non-Normed Fit Index (NNFI)*

The NFI assesses the model by comparing the  $X^2$  value of the model to the  $X^2$  of the null model (Hooper et al., 2008). The null/independence model is the poorest case scenario, as it specifies that all measured variables are uncorrelated. Values for this statistic range from 0 to 1, with Bentler and Bonnet (1980) suggesting that values greater than .90 indicate a good fit. According to Hooper et al. (2008), the cut-off criteria should be  $NFI \geq .95$ . However, the major drawback to this index is that it is sensitive to the sample size, thereby underestimating the fit for samples smaller than 200 (Klin, 2012). This problem can be resolved by the Non-Normed Fit Index (NNFI) (also known as the Tucker-Lewis Index), an index that favours simpler models. Nonetheless, in a situation where the researcher uses a small sample, the value of NNFI can indicate a poor fit, regardless of other statistics pointing towards a good fit (Hooper et al., 2008; Klin, 2012; Tabachnick et al., 2013). Another problem with the NNFI is that because of its non-normed nature, values can rise above 1.0 and thus be difficult to interpret (Byrne, 2013; Hooper et al., 2008). In general, values as low as .80 as a cut-off point have been preferred – however,  $NNFI \geq .95$  was suggested as being indicative of a good fit (Hu & Bentler, 1999).

## **6.6 FORMULATION OF RESEARCH HYPOTHESES**

A hypothesis is a clear statement in which something is predicted (Cohen et al, 2011). It clearly describes what the researcher expects or predicts will happen in the research study. With regard to the literature review chapters, the central hypothesis was to determine the relationship between ethical context and behaviour, conceptualised as mentioned, and the job retention and performance, conceptualised as indicated. The following research hypotheses were formulated in order to achieve the empirical objective of this study. Table 6.6 below outlined the research hypotheses.

Table 6.6

*Research Hypotheses*

Empirical research aims	Research hypothesis	Statistical procedure
<p><b>Research aim 1</b></p> <p>To empirically assess the nature of the statistical interrelationship between ethical context and behaviour variables, conceptualised as ethical culture, ethical climate, and ethical leadership, and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB), as manifested in a sample of respondents in the Railway organisation in the DRC.</p>	<p>H01: There is no statistically significant interrelationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.</p> <p>Ha1: There are statistically significant interrelationships between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.</p>	Correlation analysis
<p><b>Research aim 2:</b></p> <p>To empirically assess the nature of the overall statistical relationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, as a composite set of independent latent variables and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB as a composite set of dependent latent variables.</p>	<p>H02: The ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership as a composite set of independent latent variables, are not significantly and positively related to job retention and performance, related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB) as a composite set of dependent latent variables.</p> <p>Ha2: The ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership) as a composite set of independent</p>	Canonical correlation analysis

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latent variables are significantly and positively related to job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) as a composite set of dependent latent variables.

**Research aim 3:**

To empirically assess whether or not the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, positively and significantly predict the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

H03: The ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, do not positively and significantly predict the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

Ha3: The ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, positively and significantly predict the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

Regression analysis

**Research aim 4:**

Based on the overall statistical relationship between the ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership), and the job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), to determine whether there are a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

H04: The theoretical ethical context and behaviour model does not have a good fit with the empirically manifested structure model.

Ha4: The theoretical ethical context and behaviour model has a good fit with the empirically manifested structure model.

Structural equation modeling

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**Research aim 5:**

To empirically assess whether or not biographical characteristics (age, gender, educational level and job tenure) significantly moderate the relationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

H05: The biographical variables (age, gender, educational level and job tenure) do not significantly and positively moderate the relationship between the independent ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, and the dependent job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

Ha5: The biographical variables (age, gender, educational level and job tenure) do significantly and positively moderate the relationship between the independent ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, and the dependent job retention and performance related-factors, conceptualised as- work engagement, job satisfaction, organisational commitment and OCB.

Hierarchical moderated regression analysis

**Research aim 6:**

To empirically assess whether or not significant differences exist between the subgroup of biographical characteristics that acted as significant moderators between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB as manifested in the sample of

H06: There are no significant mean differences between the subgroup of biographical variables that act as significant moderators between the independent ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership and the dependent job retention and performance related factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

Ha6: There are significant mean differences between the subgroup of biographical variables that act as

Test for significant mean differences

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respondents.

significant moderators between the independent ethical context and behaviour variables, conceptualised as ethical culture ethical climate and ethical leadership, and the dependent job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

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Note: H0 (null hypothesis); Ha (alternative hypothesis)

## **6.7 CHAPTER SUMMARY**

This chapter addressed the first steps of the empirical investigation, which included the determination and description of the sample, choice of psychometric battery, administration and scoring of the psychometric battery, formulation of the research hypotheses, and the statistical procedures that will be followed for the processing of the data, as well as for determining whether or not the content is appropriate.

Chapter 7 will address empirical research aims 1–6 as defined in Table 6.6.

## CHAPTER 7 RESEARCH RESULTS

This chapter discusses the results of the statistical analyses which were performed in order to test the hypotheses formulated for the purposes of this study. Steps 7 and 8 of the empirical investigation will be discussed. The results of the empirical research will be reported in the form of tables and figures. The results will be interpreted and integrated with the literature review. The chapter starts with a discussion of descriptive statistics followed by a discussion of correlational and inferential (multivariate) techniques.

### 7.1 DESCRIPTIVE STATISTICS

This section discusses the three main steps involved in descriptive statistics, namely (1) the internal consistency reliability of the measuring instruments, which is calculated by means of the Cronbach's alpha coefficient, and the uni-dimensionality of the instruments, which is measured by means of Rasch analysis, and lastly (2) the means and standard deviations, skewness and kurtosis of the data.

#### 7.1.1 Interpretation of internal consistency reliabilities: Rasch analyses and Cronbach's alpha coefficients of the measures

The following section reports on the internal consistency and item reliability of the Corporate Ethical Virtue (CEV), Ethical Climate Questionnaire (ECQ), Ethical Leadership Work Questionnaire (ELWQ), Utrecht Work Engagement Scale (UWES), Job Satisfaction Questionnaire (JSQ), Organisational Commitment Scale (OCS), and the OCB Questionnaire (OCBQ).

##### 7.1.1.1 Scale reliability: Corporate Ethical Virtue (CEV)

Table 7.1 below shows that the items separation statistics are in line with the guideline of  $\geq 2.00$  (Bond & Fox 2013) for all the CEV dimensions. This finding indicates that the items in the various sub-scales differentiate well between the measured variables. The person separation indices for most of the sub-scales are closer than the guideline ( $\geq 2.00$ ) (Bond et al., 2013), with the exception of the feasibility dimension. The low person separation indices indicate that the subscales did not separate or discriminate well among respondents with different abilities, or that the respondents misunderstood the items, or that they were reluctant to answer the questions with the same intensity. With the exception of the feasibility ( $\alpha .68$ ) dimension, all the other subscales showed acceptable Cronbach's Alpha reliability

coefficients above the guideline of .70 (Nunnally & Bernstein, 2010). The feasibility subscale will be excluded from the statistical analyses because of its low Cronbach's Alpha coefficient.

Overall, Table 7.1 shows that the infit and outfit chi-square statistics for the person and item measures are equal to or closer to 1.00, as supported by Kaptein (2011), indicating that the CEV item is a reliable measure of the ethical culture construct. In agreement with the guideline proposed by Bond et al. (2013), no item underfit (fit statistics  $\geq 1.30$ ) or person underfit (fit statistics  $\leq .70$ ) were detected. The item infit and outfit statistics were all below 2.00, which indicates that useful and correct information was obtained from the participants, and also that the same information could most probably be obtained from participants in other settings. The person infit and outfit indicate that the respondents answered the measures consistently.

Table 7.1

*Descriptive Statistics: Rasch Summary Statistics (Ethical culture) (N= 839)*

Scale dimension	RASCH internal consistency reliability analyses					
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	Alpha
Ethical culture total						
Person	1.56(.99)	1.02(.43)	1.04(.46)	4.41	.95	
Item	.00(.23)	1.00(.27)	1.04(.27)	4.54	.95	.97
Clarity						
Person	1.55(.89)	1.03(.62)	1.05(.65)	2.05	.81	
Item	.00(.19)	.98(.08)	1.05(.17)	3.38	.92	.88
Congruency of supervisor						
Person	1.95(1.55)	1.00(.69)	.99(.69)	1.80	.76	
Item	.00(.23)	.99(.12)	.99(.13)	3.76	.93	.84
Congruency of management						
Person	1.30(.77)	.99(.92)	1.00(.93)	1.21	.59	
Item	.00(.77)	1.00(.11)	1.00(.12)	2.21	.83	.79
Feasibility						
Person	1.48(.88)	.97(.64)	.96(.62)	.86	.43	
Item	.00(.26)	1.00(.17)	.96(.14)	5.00	.96	.68
Supportability						
Person	1.93(1.62)	1.01(.80)	1.01(.81)	1.74	.75	
Item	.00(.17)	.99(.07)	1.01(.08)	2.66	.88	.83
Transparency						
Person	1.91(1.58)	1.00(.71)	1.00(.71)	1.99	.80	
Item	.00(.26)	.99(.11)	1.00(.14)	4.40	.95	.87
Discussability						
Person	1.76(1.35)	1.04(.68)	1.03(.68)	2.03	.80	
Item	.00(.23)	.99(.13)	1.03(.15)	4.00	.94	.88
Sanctionability						
Person	1.76(1.37)	1.04(.84)	1.04(.86)	1.90	.78	
Item	.00(.20)	.99(.18)	1.04(.23)	3.22	.91	.89

#### 7.1.1.2 Scale reliability: Ethical Climate Questionnaire (ECQ)

Table 7.2 below makes it clear that item separation statistics are in line with the guideline of ( $\geq 2.00$ ) (Bond et al., 2013) for all the ECQ subscales. These findings indicate that the items in the various subscales differentiate well between the measured variables. The person separation indices for all the subscales are in line with the guideline of  $\geq 2.00$ , except for the independence and rules sub-scale (Bond et al., 2013). All the subscales had acceptable Cronbach's Alpha reliability coefficients above the guideline (Nunnally & Bernstein, 2010).

In general, Table 7.2 shows that the infit and outfit chi-square statistics for the person and item measures are equal or closer to 1.00, as stipulated by Cullen et al. (2006), indicating that the ECQ item is a reliable measure of the ethical culture construct. In agreement with the guideline proposed by Bond et al. (2013), no item underfit (fit statistics  $\geq 1.30$ ) or person underfit (fit statistics  $\leq .70$ ) was detected. The item infit and outfit statistics were all below 2.00, which indicates that useful and correct information was obtained from the participants and that the same information could most probably be obtained from participants in other settings. The person infit and outfit indicate that the respondents answered the measures consistently.

Table 7.2

*Descriptive Statistics: Rasch Summary Statistics (Ethical climate) (N= 839)*

Scale dimension	RASCH internal consistency reliability analyses					
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	Alpha
Ethical climate Total						
Person	1.67(1.13)	1.04(.57)	1.04(.57)	3.43	.92	
Item	.00(.18)	.99(.11)	1.04(.13)	3.28	.91	.95
Caring						
Person	1.77(1.32)	1.03(.65)	1.03(.65)	2.58	.87	
Item	.00(.18)	.99(.17)	1.03(.19)	3.17	.91	.91
Law and codes						
Person	2.01(1.62)	1.03(.84)	1.03(.85)	2.02	.80	
Item	.00(.20)	.98(.17)	1.03(.26)	3.23	.91	.88
Rules						
Person	2.58(2.10)	.97(1.14)	.97(1.4)	1.52	.70	
Item	.00(.24)	.98(.20)	.97(.21)	3.12	.91	.81
independence						
Person	1.88(2.13)	.99(.87)	.99(.87)	1.89	.78	
Item	.00(.37)	.98(.10)	.99(.15)	5.81	.97	.86
Instrumental						
Person	2.19(1.65)	1.00(1.19)	1.00(1.20)	1.72	.75	
Item	.00(.30)	1.00(.28)	1.00(.30)	4.15	.95	.81

### 7.1.1.3 Scale reliability: Ethical Leadership Work Questionnaire (ELWQ)

Table 7.3 below records that the items separation statistics are in line with the guideline of  $\geq 2.00$  (Bond et al., 2013) for most of the EWLQ dimensions. The people orientation, fairness and integrity sub-dimensions are lower than the item separation indices, but closer to the guideline of  $\geq 2.00$  (Bond et al., 2013). These findings indicate that the items in some sub-dimensions differentiate well between the measured variables. The person separation indices indexes for all the dimensions were somewhat lower than this guideline (Bond et al.,

2013), except for the total ethical leadership construct, which was above the said guideline (Bond et al., 2013). The low person separation indices indicate that the sub-dimensions did not separate or discriminate well among respondents with different abilities, or that respondents misunderstood the items, or that they were reluctant to answer the questions with the needed intensity. Nevertheless, all sub-scales indicate an acceptable Cronbach's Alpha reliability coefficient above the guideline of .70 (Nunnally & Bernstein, 2010).

In general, Table 7.3 indicates that the infit and outfit chi-square statistics for all the person and item measures are equal or close to 1.00, as suggested by Cervellione, Lee and Bonnano (2009) and Bond et al. (2013), indicating that the EWLQ scale items are a reliable measure of the ethical leadership construct. With regard to the guideline provided by Bond et al. (2013), no item underfit (fit statistics  $\leq .70$ ) or person underfit (fit statistics  $\geq 1.30$ ) was detected. The item infit and outfit statistics were all lower than 2.00, which indicates that constructive and useful information was obtained from the respondents and that respondents in other settings could provide the same responses. The person infit and outfit indices show that the respondents answered the items consistently.

Table 7.3

*Descriptive Statistics: Rasch Summary Statistics (Ethical leadership) (N= 839)*

Scale dimension	RASCH internal consistency reliability analyses					
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	Alpha
Ethical leadership Total						
Person	1.54(1.03)	1.03(.50)	1.03(.50)	3.66	.93	
Item	.00(.17)	.99(.16)	1.03(.16)	3.20	.91	.95
People orientation						
Person	2.19(1.63)	1.00(.74)	1.00(.75)	1.94	.79	
Item	.00(.11)	.99(.13)	1.00(.15)	1.60	.72	.85
Fairness						
Person	1.96(1.64)	1.01(.82)	1.01(.83)	1.79	.76	
Item	.00(.09)	.99(.14)	1.01(.14)	1.17	.58	.83
Power sharing						
Person	2.00(1.59)	1.01(.79)	1.00(.78)	1.72	.75	
Item	.00(.19)	1.00(.21)	1.00(.21)	2.84	.89	.84
Concern for sustainability						
Person	2.42(1.48)	1.00(.99)	1.01(.98)	1.08	.54	
Item	.00(.48)	.98(.19)	1.00(.22)	7.12	.98	.70

Scale dimension	RASCH internal consistency reliability analyses					Alpha
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	
Ethical guidance						
Person	1.82(1.38)	1.01(.66)	1.02(.67)	1.72	.75	
Item	.00(.17)	.99(.12)	1.01(.16)	2.99	.90	.82
Role clarification						
Person	1.77(1.87)	.98(.90)	.97(.89)	1.70	.74	
Item	.00(.33)	.98(.21)	.97(.21)	4.69	.96	.86
Integrity						
Person	1.44(1.96)	.95(1.18)	.95(1.17)	1.27	.62	
Item	.00(.14)	.99(.16)	.95(.18)	1.77	.76	.83

#### 7.1.1.4 Scale reliability: Utrecht Work Engagement Scale (UWES)

Table 7.4 below indicates that the item separation statistics were satisfactory, compared to the guideline of at least 2.00, as proposed by Bond et al. (2013), for all the UWES dimensions. These findings indicate that the items in the diverse sub-dimensions differentiate well among the measured variables. The person separation indices of all the sub-dimensions were also sufficient compared to the guideline of  $\geq 2.00$  (Bond et al., 2013). All the scale dimensions had an acceptable Cronbach's Alpha reliability coefficient above the guideline of .70 (Nunnally & Bernstein, 2010).

Overall, Table 7.4 below records that the infit and outfit chi-square statistics for the person and item measures are equal or closer to 1.00, as recommended by Cervellione et al. (2009), signifying that the UWES scale items are a reliable measure of the work engagement variable. In line with the guideline provided by Bond et al. (2013), no item underfit (fit statistics  $\geq 1.30$ ) or person underfit (fit statistic  $\leq .70$ ) was detected. The item infit and outfit statistics were all below 2.00, which indicates that useful information was obtained from the respondents and that the same answers could be obtained from participants in other settings. The person infit and outfit indices show that participants responded in a consistent manner.

Table 7.4

*Descriptive Statistics: Rasch Summary Statistics (Work engagement) (N= 839)*

Scale dimension	RASCH internal consistency reliability analyses					
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	Alpha
Work engagement						
Total						
Person	2.08(2.53)	1.00(.73)	1.01(.74)	3.71	.93	
Item	.00(.28)	.98(.11)	1.01(.16)	4.68	.96	.94
Vigour						
Person	2.64(3.96)	.96(1.55)	.96(.55)	2.02	.56	
Item	.00(.17)	.98(.25)	.96(.32)	2.75	.75	.91
Dedication						
Person	2.66(3.79)	.97(1.27)	.96(1.26)	2.17	.82	
Item	.00(.60)	.96(.14)	.97(.19)	7.66	.98	.88
Absorption						
Person	2.08(2.82)	.99(.93)	.99(.94)	2.75	.88	
Item	.00(.36)	.97(.06)	.99(.06)	5.54	.97	.91

#### 7.1.1.5 Scale reliability: Job Satisfaction Questionnaire (JSQ)

As Table 7.5 below indicates, the item separations for all the dimensions were sufficient compared to the guideline of at least 2.00, as indicated by Bond et al. (2013), with the exception of the item for satisfaction with promotion. These findings indicate that the items in the various dimensions differentiate well among the measured variables. The low item separation indices indicate that the item level may be difficult. The person separation indices were lower than the guideline of  $\geq 2.00$  (Bond et al., 2013). All scale dimensions indicated Cronbach's Alpha reliability coefficients above the guideline of .70 (Nunnally & Bernstein, 2010).

Overall, Table 7.5 indicates that the infit and outfit chi-square statistics for both the person and item measures are equal to or close to 1.00, as proposed by Bond et al. (2013), showing that the JSQ scale items are a reliable measure of the job satisfaction variable. In line with the guideline provided by Bond et al. (2013), no item under-fit (fit statistics  $\geq 1.30$ ) or person under-fit (fit statistic  $\leq .70$ ) was detected. The item infit and outfit statistics were all below 2.00, which indicates that useful information was obtained from the respondents and that the

same answers could be obtained from participants in other settings. The person infit and outfit indices indicate that participants responded in a consistent manner.

Table 7.5

*Descriptive Statistics: Rasch Summary Statistics (Job satisfaction) (N= 839)*

Scale dimension	RASCH internal consistency reliability analyses					
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	Alpha
Job satisfaction Total						
Person	1.85(1.20)	1.02(.54)	1.02(.55)	2.82	.89	
Item	.00(.24)	.99(.13)	1.02(.13)	4.32	.95	.92
Satisfaction with pay						
Person	2.47(2.59)	.94(1.06)	.94(1.07)	1.93	.79	
Item	.00(.18)	.99(.16)	.94(.14)	2.19	.83	.86
Satisfaction with promotion						
Person	2.21(1.73)	.92(.99)	.92(1.00)	1.15	.57	
Item	.00(.09)	.99(.17)	.92(.22)	.84	.41	.74
Satisfaction with co-workers						
Person	.93(.77)	1.00(.60)	1.01(.70)	1.21	.59	
Item	.00(.47)	1.03(.23)	1.01(.19)	7.80	.98	.72
Satisfaction with supervisor						
Person	2.25(2.07)	.99(.86)	1.00(.87)	1.66	.73	
Item	.00(.23)	.99(.26)	1.00(.28)	3.03	.90	.84
Satisfaction with work itself						
Person	2.26(2.06)	.94(1.13)	.95(1.15)	1.53	.70	
Item	.00(.34)	.98(.16)	.95(.19)	4.73	.96	.80

#### 7.1.1.6 Scale reliability: Organisational Commitment Scale (OCS)

Table 7.6 below indicates that the item separations for all the dimensions were sufficient compared to the guideline of at least 2.00, as indicated by Bond et al. (2013), for all of the OCS dimensions. These findings indicate that the items in the various dimensions differentiate well between the measured variables. The person separation indices for all the dimensions are in line with the guideline provided by Bond et al. (2013). All the dimensions had acceptable Cronbach's Alpha reliability coefficients above the guideline of .70 (Nunnally & Bernstein, 2010).

In general, Table 7.6 indicates that the infit and outfit chi-square statistics for both the person and item measures are equal to or close to 1.00, as proposed by Bond et al. (2013), making

clear that the JSQ scale items are a reliable measure of the job satisfaction variable. In line with the guideline provided by Bond et al. (2013), no item under-fit (fit statistics  $\geq 1.30$ ) or person under-fit (fit statistic  $\leq .70$ ) was detected. The item infit and outfit statistics were all below 2.00, which suggests that useful information was obtained from the respondents and that the same answers could be obtained from participants in other settings. The person infit and outfit indices indicate that participants responded in a consistent manner.

Table 7.6

Descriptive Statistics: Rasch Summary Statistics (Organisational commitment) (N= 839)

Scale dimension	RASCH internal consistency reliability analyses					
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	Alpha
Organisational commitment Total						
Person	2.10(1.32)	1.01(.43)	1.01(.40)	3.41	.92	
Item	.00(.24)	1.00(.16)	1.01(.16)	4.07	.94	.94
Affective commitment						
Person	2.49(1.70)	1.01(.65)	1.00(.65)	2.06	.81	
Item	.00(.38)	.99(.25)	1.00(.26)	5.52	.97	.86
Continuance commitment						
Person	2.26(1.59)	.99(.54)	1.00(.55)	2.17	.83	
Item	.00(.24)	.99(.18)	1.00(.22)	3.83	.94	.88
Normative commitment						
Person	2.44(1.81)	1.00(.71)	1.01(.72)	2.30	.84	
Item	.00(.23)	1.00(.15)	1.01(.13)	3.33	.92	.88

#### 7.1.1.7 Scale reliability: OCB Questionnaire (OCBQ)

Table 7.7 indicates that the item separations for all the dimensions were sufficient compared to the guideline of at least 2.00, as indicated by Bond et al. (2013), for all of the OCBQ dimensions. These findings show that the items in the various dimensions differentiate well between the measured variables. The person separation indices for all the dimensions are in line with the guideline of 2.00 provided by Bond et al. (2013), with the exception of the altruism ( $\alpha = 66$ ) and conscientiousness ( $\alpha = 68$ ) dimensions, All the other scale dimensions recorded acceptable Cronbach's Alpha reliability coefficients above the guideline of .70 (Nunnally & Bernstein, 2010).

Overall, Table 7.6 indicates that the infit and outfit chi-square statistics for both the person and item measures are equal to or close to 1.00, as proposed by Bond et al. (2013), clarifying that the JSQ scale items are a reliable measure of the job satisfaction variable. In line with the guideline provided by Bond et al. (2013), no item under-fit (fit statistics  $\geq 1.30$ )

or person under-fit (fit statistic  $\leq .70$ ) was detected. The item infit and outfit statistics were all below 2.00, which indicates that useful information was obtained from the respondents and that the same answers could be obtained from participants in other settings. The person infit and outfit indices indicate that participants responded in a consistent manner.

Table 7.7

*Descriptive Statistics: Rasch Summary Statistics (OCB) (N= 839)*

Scale dimension	RASCH internal consistency reliability analyses					
	Average measure (SD)	Infit (SD)	Outfit (SD)	Separation	Reliability	Alpha
<b>OCB Total</b>						
Person	1.63(1.13)	1.05(.56)	1.06(.57)	2.92	.89	
Item	.00(.23)	.99(.20)	1.06(.22)	4.20	.95	.93
<b>Altruism</b>						
Person	2.11(1.29)	1.01(.79)	1.00(.78)	1.11	.55	
Item	.00(.15)	.99(.19)	1.00(.18)	2.23	.83	.66
<b>Conscientiousness</b>						
Person	1.76(1.43)	1.02(1.04)	1.02(1.05)	1.23	.60	
Item	.00(.20)	.99(.21)	1.02(.16)	3.18	.91	.68
<b>Sportsmanship</b>						
Person	1.70(1.52)	1.01(.83)	1.00(.86)	1.49	.69	
Item	.00(.24)	.98(.18)	1.00(.20)	4.27	.95	.74
<b>Courtesy</b>						
Person	1.96(1.50)	.99(.66)	1.00(.67)	1.48	.69	
Item	.00(.26)	.99(.10)	1.00(.14)	4.33	.95	.76
<b>Civic virtue</b>						
Person	1.66(1.26)	1.00(.62)	1.00(.63)	1.32	.64	
Item	.00(.24)	.99(.28)	1.00(.33)	4.31	.95	.75

### 7.1.2 Means and standard deviations

The results for the means and standard deviations of the CEV, ECQ, EWLQ, UWES, JSQ, OCS, and OCBQ are summarised in Table 7.8 below.

#### 7.1.2.1 Corporate Ethical Virtue (ethical culture)

As Table 7.8 below shows, the mean scores ranged from 4.42 to 3.63. The sample of participants obtained the highest mean score on the feasibility (M = 4.42; SD = .82) variable, followed by the sanctionability (M = 4.10; SD = .63) variable. These indicate that participants perceive their organisation to create an atmosphere which enables them to comply with the normative expectations (well elaborated code of conduct). They also appear to be aware that unethical behaviour is not tolerated or even encouraged in their organisation. Individuals who perceive their organisation to provide resources such as time, equipment and personal

authority to act according to the norms and values will perform their tasks with responsibility (Kaptein, 2008).

The participants' perception of discussability was relatively high ( $M = 4.07$ ;  $SD = .60$ ), followed by congruency of management ( $M = 4.05$ ;  $SD = .64$ ) and supportability ( $M = 4.05$ ;  $SD = .66$ ). This indicates that they view their supervisor and management as role models, and are given the opportunity to raise and discuss ethical issues in their work environment. They also perceive their organisation to provide support, in order for them to meet the normative expectations. This could imply that participants are supported and treated with respect, and therefore comply with expected norms.

The participants scored relatively high on transparency ( $M = 4.02$ ;  $SD = .68$ ) and congruency of supervisor ( $M = 4.01$ ;  $SD = .68$ ), while clarity recorded the lowest mean score ( $M = 3.63$ ;  $SD = .57$ ) of all the variables. This suggests that they are provided with clear normative expectations, are well informed about the nature and consequences of their behaviour, and are given the opportunity to expose unethical behaviour. This reinforces the point that individuals who are provided with a clear ethical standard are more likely to observe, comply with the norms and expose unethical acts (Kaptein, 2011).

Skewness values for the CEV ranged between  $-.780$  and  $-.304$ , thereby falling within the  $-1$  and  $+1$  normality range recommended for these coefficients (Cohen et al., 2011). The kurtosis values ranged between  $-.210$  and  $.422$ , thereby falling within the  $-1$  and above the  $+1$  normality range recommended for these coefficients (Tredoux et al., 2013).

Table 7.8

*Descriptive Statistics: Mean Scores, Standard Deviations, Skewness and Kurtosis for the Seven Scales (n = 839)*

<b>Variables</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Skewness</b>	<b>Kurtosis</b>
CEV				
Clarity	3.63	.57	-.304	-.773
Congruency of supervisor	4.01	.68	-.685	-.308
Congruency of management	4.05	.64	-.302	-.367
Feasibility	4.42	.82	-.780	.422
Supportability	4.05	.66	-.459	-.581
Transparency	4.02	.68	-.665	-.210
Discussability	4.07	.60	-.488	-.569
Sanctionability	4.10	.63	-.411	-.424
ECQ				
Caring	4.02	.60	-.708	-.377
Law and Code	4.08	.64	-.612	-.215
Rules	4.03	.66	-.767	.559
Independence	3.98	.85	-.724	-.384
Instrumental	4.12	.61	-.485	.203
EWLQ				
People orientation	3.99	.63	-.737	.397
Fairness	3.92	.64	-.724	.266
Power sharing	4.00	.63	-.295	-.649
Concern for sustainability	4.04	.56	-.279	.283
Ethical guidance	4.02	.61	-.539	-.359
Role clarification	3.95	.70	-.199	-.552
Integrity	3.93	.86	-.598	-.065
UWES				
Vigour	4.57	.99	-.245	-.704
Dedication	4.47	.92	-.234	-.546
Absorption	4.44	.90	-.295	-.885
JSQ				
Satisfaction with pay	3.95	.73	-.322	-.618
Satisfaction with promotion	4.01	.61	-.199	-.083
Satisfaction with co-workers	4.15	.55	-.142	-.442
Satisfaction with supervisor	4.00	.74	-.672	.137
Satisfaction with work itself	4.02	.67	-.448	-.072
OCS				
Affective commitment	4.07	.55	-.643	.002
Continuance commitment	4.08	.65	-.845	.062
Normative commitment	4.13	.59	-.500	-.776
OCBS				
Altruism	4.13	.51	-.644	.267
Conscientiousness	4.14	.55	-.430	-.189
Sportsmanship	4.01	.64	-.499	-.760
Courtesy	4.02	.62	-.543	-.274
Civic virtue	3.98	.68	-.747	.002

### 7.1.2.2 *The Ethical Climate Questionnaire (ethical climate)*

Table 7.8 above indicates that the mean scores ranged from 4.08 to 3.98. The sample of participants obtained the highest mean score for instrumental climate ( $M = 4.12$ ;  $SD = .61$ ), followed by law and codes climate ( $M = 4.08$ ;  $SD = .64$ ). This makes it clear that participants perceive their organisation to discourage self-interested behaviour. They also perceive their organisation to adhere to the code, regulation of their profession and other authority, and also comply with the requirements of the law and codes, in order to avoid breaking them. This implies that individuals' ethical decision-making and behaviour in the work environment are governed by external codes (Martin et al., 2006).

Participants' perception of the rules climate was relatively high ( $M = 4.03$ ;  $SD = .66$ ), as well as that of caring climate ( $M = 4.02$ ;  $SD = .60$ ), followed by independence climate ( $M = 3.96$ ;  $SD = .85$ ). This indicates that participants adhere to the accepted rules and regulations that guide the ethical behaviour in their organisation. They also appear to believe that decisions should be based on an overarching concern for the well-being of others. This could imply that individuals who internalise the organisation's rules and procedures tend to be guided by them, and therefore act and behave in an ethical manner and experience a caring atmosphere (Martin et al., 2006). Skewness values for the ECQ ranged between  $-.612$  and  $-.755$ , thereby showing a skewness to the left (Cohen et al., 2011). The kurtosis values ranged between  $-.384$  and  $.559$ , thereby falling within the  $-1$  and above the  $+1$  normality ranges recommended for these coefficients (Tredoux et al., 2013).

### 7.1.2.3 *The Ethical Leadership Work Questionnaire (ethical leadership)*

As Table 7.8 indicates, the mean scores ranged from 4.04 to 3.92. The sample of the participants obtained the highest mean score for concern for sustainability ( $M = 4.04$ ;  $SD = .56$ ) and ethical guidance ( $M = 4.02$ ;  $SD = .61$ ), followed by power sharing ( $M = 4.00$ ;  $SD = .63$ ). This indicates that participants believe that their leaders are concerned about them, the stakeholders and the society. The participants also appear to be involved in the decision-making process, are listened to, and are given more control over matters concerning their jobs.

The participants' people orientation was also relatively high ( $M = 3.99$ ;  $SD = .63$ ), followed by role clarification ( $M = 3.95$ ;  $SD = .70$ ). Participants therefore feel supported and are treated with respect and dignity by their leaders. They also appear to be engaged in an open communication and have clear responsibilities, performance goals and expectations.

Individuals who are treated with respect and dignity and provided with a clear performance goal tend to be more responsible and have an enhanced performance standard (Kalshoven et al., 2011).

The participants' perception of integrity was also relatively high ( $M = 3.93$ ;  $SD = .86$ ), although their lowest mean score was for fairness ( $M = 3.92$ ;  $SD = .64$ ). This indicates that participants believe that their leaders are less consistent in their talk and action, may or may not keep promises, and behave in an ethical manner. The participants also believe that their leaders may or may not make principled choices, be trustworthy and honest, and avoid practising favouritism (Kalshoven et al., 2011).

Skewness values for the ELWQ ranged between  $-.737$  and  $-.199$ , thereby recording a skewness to the left (Cohen et al., 2011). The kurtosis values ranged between  $-.065$  and  $.397$ , thereby falling within the  $-1$  and above the  $+1$  normality ranges recommended for these coefficients (Tredoux et al., 2013).

#### 7.1.2.4 *The Utrecht Work Engagement Scale (UWES)*

Table 7.8 indicates that the mean score ranged from 4.57 to 4.44. The sample of participants obtained the highest mean score for the UWES vigour ( $M = 4.57$ ;  $SD = .99$ ) and dedication ( $M = 4.47$ ;  $SD = .92$ ) variables, followed by the absorption ( $M = 4.44$ ;  $SD = .90$ ) variable. This indicates that participants feel engaged in their work role. They appear to perceive their work environment as ethical, and have high energy and mental resilience, as well as being enthusiastic and proud. They also appear to be completely and deeply absorbed in their work. Individuals who are vigorous, enthusiastic, proud and absorbed tend to be engaged in their work role (Schaufeli et al., 2006).

Skewness values for the UWES ranged between  $-.234$  and  $-.295$ , thereby showing a skewness to the left (Cohen et al., 2011). The kurtosis values ranged between  $-.546$  and  $-.885$ , thereby indicating that the probability for extreme values is less than for the normal distribution, and the values are spread wider around the mean. This fell within the  $-1$  and above the  $+1$  normality range recommended for these coefficients (Tredoux et al., 2013).

#### 7.1.2.5 *The Job Satisfaction Questionnaire (job satisfaction)*

Table 7.8 indicates that the mean score ranged from 4.15 to 3.95. The sample of participants obtained the highest mean score for the JSQ satisfaction with co-workers ( $M = 4.15$ ;  $SD = .55$ ) variable and the lowest for the satisfaction with pay ( $M = 3.95$ ;  $SD = .73$ ) variable. This indicates that participants experience their work environment as encouraging good relationships and creating opportunities for them to interact with others on the job. The participants' perceptions of satisfaction with pay were slightly lower, which implies that they see the amount of effort put into their work as adequate, but feel less compensated by the amount of money that they receive from the employer. Individuals who are working in good conditions, with proper facilities and adequate pay tend to be satisfied (Budiman, Anantadjaya & Prasetyawati, 2014).

The participants' perception of satisfaction with work itself was relatively high ( $M = 4.02$ ;  $SD = .67$ ), followed by satisfaction with promotion ( $M = 4.01$ ;  $SD = .61$ ) and satisfaction with supervision ( $M = 4.00$ ;  $SD = .74$ ). This indicates that participants feel satisfied with their working conditions, and have proper facilities and adequate variety, as well as challenges, discretion and scope for using their abilities and skills. The participants appear to be given the opportunity for personal growth, as well as to increase their responsibility and social status. They also feel supported by their supervisor in the completion of their tasks. Individuals who are provided with good working conditions and opportunities for training tend to portray a positive attitude and behaviour in their work environment (Yeh, 2014).

Skewness values for the JSQ ranged between  $-.142$  and  $-.672$ , thereby showing a skewness to the left (Cohen et al., 2011). The kurtosis values ranged between  $-.072$  and  $.137$ , thereby falling within the  $-1$  and above the  $+1$  normality range recommended for these coefficients (Tredoux et al., 2013).

#### 7.1.2.6 *The Organisational Commitment Scale (organisational commitment)*

As Table 7.8 indicates, the mean score ranged from 4.13 to 4.07. The sample of participants obtained the highest mean score for the OCS normative commitment ( $M = 4.13$ ;  $SD = .59$ ) variable, followed by the continuance commitment ( $M = 4.08$ ;  $SD = .65$ ) variable. This indicates that participants believe that it is morally right to continue to participate in the organisation. They also appear to stay for a long time in it because of the cost of leaving or rewards of staying with the employer. This is in line with the finding that individuals who

believe that it is morally right to keep interacting with the organisation tend to continue their membership with the employer (Budiman et al., 2014).

The participants' affective commitment was also relatively high ( $M = 4.07$ ;  $SD = .55$ ), which suggests that they are emotionally and affectively attached to the organisation. Participants who are committed tend to remain employed in the same organisation for a longer period (Yeh, 2014).

Skewness values for the OCS ranged between  $-.142$  and  $-.672$ , thereby depicting a skewness to the left (Cohen et al., 2011). The kurtosis values ranged between  $-.776$  and  $.002$ , thereby falling within the  $-1$  and above the  $+1$  normality range recommended for these coefficients (Tredoux et al., 2013).

#### 7.1.2.7 *The Organisational Citizenship Behaviour Scale (OCBS)*

Table 7.8 shows that the mean score ranged from 4.14 to 3.98. The sample of participants obtained the highest mean score for conscientiousness ( $M = 4.14$ ;  $SD = .55$ ) and the lowest for civic virtue ( $M = 3.98$ ;  $SD = .68$ ). This indicates that they comply with the norms of the organisation. They appear to be punctual and accomplish their work efficiently. They also appear to accept and adhere to the rules and regulations and procedures of the organisation.

The participants' perception of altruism was also relatively high ( $M = 4.13$ ;  $SD = .51$ ), as well as for courtesy ( $M = 4.02$ ;  $SD = .62$ ), followed by sportsmanship ( $M = 4.01$ ;  $.68$ ). This indicates that participants portray helping behaviours at an individual level. The participants appear to display gestures that help others to prevent interpersonal problems from occurring. They also appear to be willing to tolerate the inevitable inconveniences and impositions of work without complaining. Participants' perceptions of civic virtue were slightly lower, which implies that they might not be involved in the political process of the organisation, which would make them less willing to participate actively in organisational events and monitor the organisation's environment for threats and opportunities (Tambe & Shanker, 2014).

Skewness values for the OCBS ranged between  $-.430$  and  $-.745$ , thereby showing a skewness to the left (Cohen et al., 2011). The kurtosis values ranged between  $-.189$  and  $.002$ , thereby falling within the  $-1$  and above the  $+1$  normality range recommended for these coefficients (Tredoux et al., 2013).

## 7.2 CORRELATIONAL STATISTICS

To examine the landscape of the interrelationship between the variables in this study, descriptive statistics had to be transformed into explanatory statistics in order to test research hypotheses H01 and H02 (Cohen et al., 2011). The relationship between variables was calculated by means of Pearson product-moment correlations. These correlations help the researcher to determine the strength and direction of the relationship between the variables under investigation.

### 7.2.1 Pearson product-moment correlation coefficients (CEV, ECQ, ELWQ)

The interrelationship between variables was computed using Pearson's product moment correlations. These correlations allowed the researcher to determine the direction and strength of the relationship between the variables under investigation. In terms of statistical significance, it was decided to set the value at 95% confidence interval level ( $p \leq .05$ ) and the practical effect size at  $r \geq .30 \geq .50$  (medium to large effect) (Tredoux et al., 2013).

#### 7.2.1.1 *Bivariate correlations between independent variables (ethical context and behaviour)*

Table 7.9 below records the Pearson product-moment correlations obtained for the CEV, ECQ and ELWQ.

Table 7.9

Bivariate Correlations between the Ethical Context and Behaviour

Variables	Total ethical culture (CEV)	Clarity (CEV)	Congruency of supervisor (CEV)	Congruency of management (VEV)	Feasibility (CEV)	Supportability (CEV)	Supportability (CEV)	Discussability (CEV)	Sanctionability (CEV)	Total ethical climate (ECQ)	Caring (ECQ)	Law & rules (ECQ)	Rules (ECQ)	Independence (ECQ)	Instrument (ECQ)	Total ethical leadership (ELW)	People orientation (ELW)	Fairness (ELW)	Power sharing (ELW)	Concern for sustainability (ELW)	Ethical guidance (ELW)	Role clarification (ELW)	Integrity (ELW)	
Total ethical culture (CEV)	1																							
Clarity (CEV)	.87***	1																						
Congruency of supervisor (CEV)	.88***	.62***	1																					
Congruency of management (VEV)	.76***	.62***	.70***	1																				
Feasibility (CEV)	.50***	.37**	.41**	.35**	1																			
Supportability (CEV)	.83***	.67***	.71***	.65***	.39**	1																		
Supportability (CEV)	.88***	.77***	.74***	.61***	.41**	.70***	1																	
Discussability (CEV)	.86***	.69***	.73***	.58***	.29*	.66***	.76***	1																
Sanctionability (CEV)	.79***	.62***	.65***	.57***	.28*	.57***	.61***	.67***	1															
Total ethical climate (ECQ)	.81***	.66***	.74***	.64***	.34**	.66 <sup>^</sup>	.70***	.71***	.71***	1														
Caring (ECQ)	.72***	.58***	.66***	.57***	.30**	.60***	.64***	.64***	.62***	.84***	1													



Table 7.9 above shows that the variables correlated significantly ( $r \geq .18$   $\geq r \geq .88$ ; small to large practical effect;  $p \leq .05$ ), and there was a negative correlation ( $r \leq -.39 \leq r \leq -.73$ ) for the instrumental ECQ variable.

The results indicate that total ethical culture correlated significantly with clarity ( $r = .87$ ; large effect;  $p \leq .05$ ), congruency of supervisor ( $r = .88$ ; large effect;  $p \leq .05$ ), congruency of management ( $r = .76$ ; large effect;  $p \leq .05$ ), feasibility ( $r = .50$ ; large effect;  $p \leq .05$ ), supportability ( $r = .83$ ; large effect;  $p \leq .05$ ), transparency ( $r = .88$ ; large effect;  $p \leq .05$ ), discussability ( $r = .86$ ; large effect;  $p \leq .05$ ) and sanctionability ( $r = .79$ ; large effect;  $p \leq .05$ ). A positive correlation was also found between all dimensions of the ethical culture variable ( $r \geq .28$ ;  $\geq .30 \geq r \geq .76$ ; small, medium and large effect;  $p \leq .05$ ).

A significant positive correlation was established between the total ethical culture variables and total ethical climate ( $r = .81$ ; large effect;  $p \leq .05$ ), and between total ethical culture and caring ( $r = .72$  large effect  $p \leq .05$ ) variables. A significant positive correlation was also found between the total ethical culture and law and code ( $r = .70$ ; large effect;  $p \leq .05$ ), and between total ethical culture and rules ( $r = .57$ ; large effect;  $p \leq .05$ ), and independence ( $r = .70$ ; large effect;  $p \leq .70$ ) variables. A significant negative correlation was found between the total ethical culture and instrument ( $r = -.65$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between total ethical culture and total ethical leadership ( $r = .79$ ; large effect;  $p \leq .05$ ), and between total ethical culture and people orientation ( $r = .63$ ; large effect;  $p \leq .05$ ), as well as between the total ethical culture and fairness ( $r = .51$ ; large effect;  $p \leq .05$ ) variables. A significant positive correlation was also established between total ethical culture and power sharing ( $r = .70$ ; large effect;  $p \leq .05$ ) and between the total ethical culture and concern for sustainability ( $r = .55$ ; large effect;  $p \leq .05$ ) variables. A positive correlation was also found between total ethical culture and ethical guidance ( $r = .69$ ; large effect;  $p \leq .05$ ), and between total ethical culture and role clarification ( $r = .64$ ; large effect;  $p \leq .05$ ), as well as between the total ethical culture and integrity ( $r = .63$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between clarity and congruency of supervisor ( $r = .62$ ; large effect;  $p \leq .05$ ) and between clarity and congruency of management ( $r = .62$ ; large effect;  $p \leq .05$ ), as well as between clarity and feasibility ( $r = .37$ ; medium effect;  $p \leq .05$ ), supportability ( $r = .67$ ; large effect;  $p \leq .05$ ), transparency ( $r = .77$ ; large effect;  $p \leq .05$ ), and discussability ( $r = .69$ ; large effect;  $p \leq .05$ ), while clarity and sanctionability correlated significantly ( $r = .62$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was discovered between clarity and total ethical climate ( $r=.66$ ; large effect;  $p\leq.05$ ), clarity and caring ( $r=.58$ ; large effect;  $p\leq .05$ ), as well as between clarity and law and codes ( $r= .60$ ; large effect;  $p\leq.05$ ), clarity and rules ( $r= .48$ ; medium effect;  $p\leq.05$ ), and clarity and independence ( $r = .60$ ; large effect;  $p\leq.05$ ). A negative correlation was found between clarity and the instrumental climate ( $r = -.49$ ; medium effect;  $p\leq.05$ ) variable.

The results indicated that clarity correlated significantly with total ethical leadership ( $r = .67$ ; large effect;  $p \leq.05$ ). A significant positive correlation was found between clarity and people orientation ( $r = .55$ ; large effect;  $p\leq.05$ ) and between clarity and fairness ( $r =.42$ ; medium effect;  $p\leq.05$ ), as well as between clarity and power sharing ( $r =.58$ ; large effect;  $p\leq.05$ ) variables. A significant positive correlation was also established between clarity and concern for sustainability ( $r=.44$ ; medium effect;  $p\leq.05$ ), clarity and ethical guidance ( $r= .57$ ; large effect;  $p \leq .05$ ), and clarity and role clarification ( $r =.58$ ; large effect;  $p\leq .05$ ), while clarity and integrity correlated significantly ( $r=.59$ ; large effect;  $p\leq.05$ ).

A significant positive correlation was found between congruency of supervisor and congruency of management ( $r =.70$ ; large effect;  $p\leq.05$ ), feasibility ( $r =.47$ ; medium effect;  $p\leq.05$ ), supportability ( $r=.71$ ; large effect;  $p \leq.05$ ), transparency ( $r =.74$ ; large effect;  $p\leq.05$ ), and discussability ( $r =.73$ ; large effect;  $p \leq.05$ ), while congruency of supervisor and sanctionability correlated significantly ( $r=.65$ ; large effect;  $p\leq.05$ ).

A significant positive correlation was discovered between congruency of supervisor and total ethical climate ( $r=.74$ ; large effect;  $p\leq.05$ ), congruency of supervisor and caring ( $r=.66$ ; large effect;  $p\leq .05$ ), congruency of supervisor and law and codes ( $r= .66$ ; large effect;  $p\leq.05$ ), congruency of supervisor and rules ( $r= .53$ ; large effect;  $p\leq.05$ ), and congruency of supervisor and independence ( $r = .65$ ; large effect;  $p\leq.05$ ). A negative correlation was found between congruency of supervisor and the instrumental climate ( $r = -.59$ ; large effect;  $p\leq.05$ ) variable.

The results indicated that congruency of supervisor correlated significantly with total ethical leadership ( $r = .73$ ; large effect;  $p \leq.05$ ). A significant positive correlation was found between congruency of supervisor and people orientation ( $r = .60$ ; large effect;  $p\leq.05$ ), congruency of supervisor and fairness ( $r =.45$ ; medium effect;  $p\leq.05$ ), and congruency of supervisor and power sharing ( $r =.65$ ; large effect;  $p\leq.05$ ) variables. A significant positive correlation was also established between congruency of supervisor and concern for sustainability ( $r=.51$ ;

large effect;  $p \leq .05$ ), congruency of supervisor and ethical guidance ( $r = .60$ ; large effect;  $p \leq .05$ ), and congruency of supervisor and role clarification ( $r = .62$ ; large effect;  $p \leq .05$ ), while congruency of supervisor and integrity correlated significantly ( $r = .60$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was found between congruency of management and feasibility ( $r = .35$ ; medium effect;  $p \leq .05$ ), supportability ( $r = .65$ ; large effect;  $p \leq .05$ ), transparency ( $r = .61$ ; large effect;  $p \leq .05$ ), and discussability ( $r = .58$ ; large effect;  $p \leq .05$ ), while congruency of management and sanctionability correlated significantly ( $r = .57$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was discovered between congruency of management and total ethical climate ( $r = .64$ ; large effect;  $p \leq .05$ ), congruency of management and caring ( $r = .57$ ; large effect;  $p \leq .05$ ), congruency of management and law and codes ( $r = .52$ ; large effect;  $p \leq .05$ ), congruency of management and rules ( $r = .49$ ; medium effect;  $p \leq .05$ ), and congruency of management and independence ( $r = .52$ ; large effect;  $p \leq .05$ ). A negative correlation was found between congruency of management and instrumental climate ( $r = -.54$ ; large effect;  $p \leq .05$ ).

The results indicated that congruency of management correlated significantly with total ethical leadership ( $r = .63$ ; large effect;  $p \leq .05$ ). A significant positive correlation was found between congruency of management and people orientation ( $r = .51$ ; large effect;  $p \leq .05$ ), congruency of management and fairness ( $r = .43$ ; medium effect;  $p \leq .05$ ), and congruency of management and power sharing ( $r = .59$ ; large effect;  $p \leq .05$ ) variables. A significant positive correlation was also found between congruency of management and concern for sustainability ( $r = .43$ ; medium effect;  $p \leq .05$ ), congruency of management and ethical guidance ( $r = .57$ ; large effect;  $p \leq .05$ ), and congruency of management and role clarification ( $r = .47$ ; medium effect;  $p \leq .05$ ), while congruency of management and integrity correlated significantly ( $r = .48$ ; medium effect;  $p \leq .05$ ).

A significant positive correlation was discovered between feasibility and supportability ( $r = .35$ ; medium effect;  $p \leq .05$ ), transparency ( $r = .41$ ; medium effect;  $p \leq .05$ ), and discussability ( $r = .29$ ; small effect;  $p \leq .05$ ), while feasibility and sanctionability correlated significantly ( $r = .28$ ; small effect;  $p \leq .05$ ).

A significant positive correlation was found between feasibility and total ethical climate ( $r = .34$ ; medium effect;  $p \leq .05$ ), feasibility and caring ( $r = .30$ ; medium effect;  $p \leq .05$ ), feasibility and law and codes ( $r = .27$ ; small effect;  $p \leq .05$ ), feasibility and rules ( $r = .19$ ; small effect;  $p \leq .05$ ), and feasibility and independence ( $r = .30$ ; medium effect;  $p \leq .05$ ) variables. A negative

correlation was established between feasibility and the instrumental climate ( $r = -.39$ ; medium effect;  $p \leq .05$ ) variable.

The results indicated that feasibility correlated significantly with total ethical leadership ( $r = .34$ ; medium effect;  $p \leq .05$ ). A significant positive correlation was found between feasibility and people orientation ( $r = .23$ ; small effect;  $p \leq .05$ ), feasibility and fairness ( $r = .18$ ; small effect;  $p \leq .05$ ), and feasibility and power sharing ( $r = .34$ ; medium effect;  $p \leq .05$ ) variables. A significant positive correlation was also discovered between feasibility and concern for sustainability ( $r = .26$ ; small effect;  $p \leq .05$ ), feasibility and ethical guidance ( $r = .30$ ; medium effect;  $p \leq .05$ ), and feasibility and role clarification ( $r = .28$ ; small effect;  $p \leq .05$ ), while feasibility and integrity correlated significantly ( $r = .29$ ; small effect;  $p \leq .05$ ).

A significant positive correlation was found between supportability and transparency ( $r = .70$ ; large effect;  $p \leq .05$ ), and supportability and discussability ( $r = .66$ ; large effect;  $p \leq .05$ ), while feasibility and sanctionability correlated significantly ( $r = .57$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was found between supportability and total ethical climate ( $r = .66$ ; large effect;  $p \leq .05$ ), supportability and caring ( $r = .60$ ; large effect;  $p \leq .05$ ), supportability and law and codes ( $r = .56$ ; large effect;  $p \leq .05$ ), supportability and rules ( $r = .48$ ; medium effect;  $p \leq .05$ ), and supportability and independence ( $r = .58$ ; large effect;  $p \leq .05$ ) variables. A negative correlation was established between supportability and the instrumental climate ( $r = -.51$ ; large effect;  $p \leq .05$ ) variable.

The results indicated that supportability correlated significantly with total ethical leadership ( $r = .64$ ; large effect;  $p \leq .05$ ). A significant positive correlation was identified between supportability and people orientation ( $r = .47$ ; medium effect;  $p \leq .05$ ), supportability and fairness ( $r = .44$ ; medium effect;  $p \leq .05$ ), and supportability and power sharing ( $r = .61$ ; large effect;  $p \leq .05$ ) variables. A significant positive correlation was also found between supportability and concern for sustainability ( $r = .45$ ; medium effect;  $p \leq .05$ ), supportability and ethical guidance ( $r = .63$ ; large effect;  $p \leq .05$ ), and supportability and role clarification ( $r = .47$ ; medium effect;  $p \leq .05$ ), while supportability and integrity correlated significantly ( $r = .47$ ; medium effect;  $p \leq .05$ ).

The results indicated that transparency correlated significantly with discussability ( $r = .76$ ; large effect;  $p \leq .05$ ), as well as with sanctionability ( $r = .61$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was established between transparency and total ethical climate ( $r = .70$ ; large effect;  $p \leq .05$ ), transparency and caring ( $r = .64$ ; large effect;  $p \leq .05$ ),

transparency and law and codes ( $r = .63$ ; large effect;  $p \leq .05$ ), transparency and rules ( $r = .46$ ; medium effect;  $p \leq .05$ ), and transparency and independence ( $r = .60$ ; large effect;  $p \leq .05$ ) variables. A negative correlation was found between transparency and the instrumental climate ( $r = -.57$ ; large effect;  $p \leq .05$ ) variable.

The results indicated that transparency correlated significantly with total ethical leadership ( $r = .69$ ; large effect;  $p \leq .05$ ). A significant positive correlation was found between transparency and people orientation ( $r = .54$ ; large effect;  $p \leq .05$ ), transparency and fairness ( $r = .44$ ; medium effect;  $p \leq .05$ ), and transparency and power sharing ( $r = .56$ ; large effect;  $p \leq .05$ ) variables. A significant positive correlation was also discovered between transparency and concern for sustainability ( $r = .45$ ; medium effect;  $p \leq .05$ ), transparency and ethical guidance ( $r = .59$ ; large effect;  $p \leq .05$ ), and transparency and role clarification ( $r = .63$ ; large effect;  $p \leq .05$ ), while transparency and integrity correlated significantly ( $r = .65$ ; large effect;  $p \leq .05$ ).

The results indicated that discussability correlated significantly with sanctionability ( $r = .67$ ; large effect;  $p \leq .05$ ). A significant positive correlation was found between discussability and total ethical climate ( $r = .71$ ; large effect;  $p \leq .05$ ), discussability and caring ( $r = .64$ ; large effect;  $p \leq .05$ ), discussability and law and codes ( $r = .62$ ; large effect;  $p \leq .05$ ), discussability and rules ( $r = .48$ ; medium effect;  $p \leq .05$ ), and discussability and independence ( $r = .58$ ; large effect;  $p \leq .05$ ) variables. A negative correlation was established between discussability and the instrumental climate ( $r = -.58$ ; large effect;  $p \leq .05$ ) variable.

The results indicated that discussability correlated significantly with total ethical leadership ( $r = .70$ ; large effect;  $p \leq .05$ ). A significant positive correlation was found between discussability and people orientation ( $r = .57$ ; large effect;  $p \leq .05$ ), discussability and fairness ( $r = .49$ ; medium effect;  $p \leq .05$ ), and discussability and power sharing ( $r = .61$ ; large effect;  $p \leq .05$ ) variables. A significant positive correlation was also established between discussability and concern for sustainability ( $r = .48$ ; medium effect;  $p \leq .05$ ), discussability and ethical guidance ( $r = .59$ ; large effect;  $p \leq .05$ ), and discussability and role clarification ( $r = .58$ ; large effect;  $p \leq .05$ ), while discussability and integrity correlated significantly ( $r = .54$ ; large effect;  $p \leq .05$ ).

The results indicated that sanctionability correlated significantly with total ethical climate ( $r = .71$ ; large effect;  $p \leq .05$ ), caring ( $r = .62$ ; large effect;  $p \leq .05$ ), law and codes ( $r = .63$ ; large effect;  $p \leq .05$ ), rules ( $r = .53$ ; large effect;  $p \leq .05$ ), and independence ( $r = .63$ ; large effect;  $p \leq .05$ ) variables. A negative correlation was found between sanctionability and the instrumental climate ( $r = -.57$ ; large effect;  $p \leq .05$ ) variable.

The results indicated that sanctionability correlated significantly with total ethical leadership ( $r = .65$ ; large effect;  $p \leq .05$ ). A significant positive correlation was identified between sanctionability and people orientation ( $r = .54$ ; large effect;  $p \leq .05$ ), sanctionability and fairness ( $r = .42$ ; medium effect;  $p \leq .05$ ), and sanctionability and power sharing ( $r = .57$ ; large effect;  $p \leq .05$ ) variables. A significant positive correlation was also found between sanctionability and concern for sustainability ( $r = .51$ ; large effect;  $p \leq .05$ ), sanctionability and ethical guidance ( $r = .58$ ; large effect;  $p \leq .05$ ), and sanctionability and role clarification ( $r = .48$ ; medium effect;  $p \leq .05$ ), while sanctionability and integrity correlated significantly ( $r = .46$ ; medium effect;  $p \leq .05$ ).

The results indicated that total ethical climate correlated significantly with caring ( $r = .84$ ; large effect;  $p \leq .05$ ), as well as law and codes ( $r = .85$ ; large effect;  $p \leq .05$ ), rules ( $r = .76$ ; large effect;  $p \leq .05$ ), and independence ( $r = .83$ ; large effect;  $p \leq .05$ ), while it was significantly negatively correlated with the instrument ( $r = -.73$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between total ethical climate and total ethical leadership ( $r = .80$ ; large effect;  $p \leq .05$ ) and people orientation ( $r = .64$ ; large effect;  $p \leq .05$ ). Total ethical climate also correlated significantly with fairness ( $r = .57$ ; large effect;  $p \leq .05$ ) and power sharing ( $r = .71$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was observed between total ethical climate and concern for sustainability ( $r = .57$ ; large effect;  $p \leq .05$ ), ethical guidance ( $r = .69$ ; large effect;  $p \leq .05$ ), role clarification ( $r = .63$ ; large effect;  $p \leq .05$ ) and integrity ( $r = .62$ ; large effect;  $p \leq .05$ ).

The results indicated that caring correlated significantly with law and codes ( $r = .70$ ; large effect;  $p \leq .05$ ), rules ( $r = .61$ ; large effect;  $p \leq .05$ ) and independence ( $r = .76$ ; large effect;  $p \leq .05$ ), while a negative correlation was observed between caring and instrument ( $r = -.56$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between caring and total ethical leadership ( $r = .72$ ; large effect;  $p \leq .05$ ), and caring and people orientation ( $r = .56$ ; large effect;  $p \leq .05$ ). Caring ethical climate also correlated significantly with fairness ( $r = .54$ ; large effect;  $p \leq .05$ ) and power sharing ( $r = .63$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between total ethical climate and concern for sustainability ( $r = .48$ ; medium effect;  $p \leq .05$ ), ethical guidance ( $r = .64$ ; large effect;  $p \leq .05$ ), role clarification ( $r = .53$ ; large effect;  $p \leq .05$ ) and integrity ( $r = .58$ ; large effect;  $p \leq .05$ ).



=.87; large effect;  $p \leq .05$ ), concern for sustainability ( $r = .76$ ; large effect;  $p \leq .05$ ), ethical guidance ( $r = .87$ ; large effect;  $p \leq .05$ ), role clarification ( $r = .75$ ; large effect;  $p \leq .05$ ) and integrity ( $r = .70$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between people orientation and fairness ( $r = .56$ ; large effect;  $p \leq .05$ ), power sharing ( $r = .62$ ; large effect;  $p \leq .05$ ), concern for sustainability ( $r = .55$ ; large effect;  $p \leq .05$ ), ethical guidance ( $r = .59$ ; large effect;  $p \leq .05$ ), role clarification ( $r = .43$ ; medium effect;  $p \leq .05$ ) and integrity ( $r = .38$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between fairness and power sharing ( $r = .59$ ; large effect;  $p \leq .05$ ), concern for sustainability ( $r = .56$ ; large effect;  $p \leq .05$ ), ethical guidance ( $r = .61$ ; large effect;  $p \leq .05$ ), role clarification ( $r = .43$ ; medium effect;  $p \leq .05$ ) and integrity ( $r = .47$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that power sharing correlated significantly with concern for sustainability ( $r = .67$ ; large effect;  $p \leq .05$ ), ethical guidance ( $r = .76$ ; large effect;  $p \leq .05$ ), role clarification ( $r = .60$ ; large effect;  $p \leq .05$ ) and integrity ( $r = .51$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was also found between concern for sustainability and ethical guidance ( $r = .64$ ; large effect;  $p \leq .05$ ), role clarification ( $r = .49$ ; medium effect;  $p \leq .05$ ) and integrity ( $r = .40$ ; medium effect;  $p \leq .05$ ) variables.

A significant correlation was observed between ethical guidance and role clarification ( $r = .56$ ; large effect;  $p \leq .05$ ) and integrity ( $r = .56$ ; large effect;  $p \leq .05$ ). Role clarification was significantly correlated with integrity ( $r = .67$ ; large effect;  $p \leq .05$ ).

7.2.1.2 Bivariate correlations between dependent variables (job retention and performance-related factors)

Table 7.10

Bivariate Correlations Between Job Retention and Performance-Related Factors

Variables	Total work engagement (UWES)	Vigour (UWES)	Dedication (UWES)	Absorption (UWES)	Total job satisfaction (JSQ)	Satisfaction with pay (JSQ)	Satisfaction with promotion (JSQ)	Satisfaction with co-worker (JSQ)	Satisfaction with supervisor (JSQ)	Satisfaction with work itself (JSQ)	Total organisational commitment (OCS)	Affective commitment (OCS)	Continuance commitment (OCS)	Normative commitment (OCS)	Total OCB (OCBQ)	Altruism (OCBQ)	Conscientiousness (OCBQ)	Sportsmanship (OCBQ)	Courtesy (OCBQ)	Civic virtue (OCBQ)	
Total work engagement (UWES)	1																				
Vigour (UWES)	.92***	1																			
Dedication (UWES)	.93***	.77***	1																		
Absorption (UWES)	.96***	.78***	.92***	1																	
Total job satisfaction (JSQ)	.70***	.64***	.66***	.68***	1																
Satisfaction with pay (JSQ)	.55***	.52***	.49**	.52***	.82***	1															
Satisfaction with promotion (JSQ)	.45**	.45**	.41**	.39**	.78***	.58***	1														
Satisfaction with co-worker (JSQ)	.52***	.41**	.51***	.54***	.70***	.42**	.45**	1													
Satisfaction with supervisor (JSQ)	.66***	.58***	.62***	.65***	.83***	.62***	.54***	.46**	1												
Satisfaction with work itself (JSQ)	.60***	.55***	.56***	.58***	.82***	.55***	.54***	.53***	.62***	1											
Total organisational commitment (OCS)	.70***	.61***	.66***	.68***	.78***	.67***	.58***	.50***	.71***	.61***	1										
Affective commitment (OCS)	.59***	.52***	.57***	.57***	.73***	.64***	.53***	.45**	.63***	.60***	.89***	1									
Continuance commitment (OCS)	.67***	.57***	.65***	.67***	.71***	.57***	.56***	.48**	.62***	.54***	.92***	.72***	1								
Normative commitment (OCS)	.63***	.56***	.58***	.61***	.69***	.61***	.48**	.42**	.68***	.52***	.91***	.71***	.74***	1							
Total OCB (OCBQ)	.64***	.56***	.62***	.63***	.68***	.62***	.51***	.42**	.58***	.52***	.84***	.74***	.77***	.76***	1						
Altruism (OCBQ)	.61***	.54***	.58***	.59***	.61***	.57***	.45**	.40**	.51***	.46**	.74***	.67***	.69***	.64***	.87***	1					
Conscientiousness (OCBQ)	.52***	.44**	.51***	.52***	.51***	.51***	.37**	.29**	.47**	.36**	.70***	.62***	.64***	.65***	.85***	.67***	1				
Sportsmanship (OCBQ)	.58***	.52***	.56***	.57***	.62***	.55***	.46**	.38**	.54***	.48**	.77***	.65***	.71***	.73***	.91***	.70***	.72***	1			
Courtesy (OCBQ)	.58***	.54***	.56***	.56***	.64***	.56***	.48**	.40**	.53***	.55***	.76***	.69***	.69***	.67***	.92***	.77***	.71***	.83***	1		
Civic virtue (OCBQ)	.53***	.44**	.53***	.53***	.62***	.58***	.51***	.37**	.51***	.44**	.73***	.65***	.68***	.65***	.88***	.74***	.67***	.78***	.74***	1	

Notes: N = 839. \*\*\*p ≤ .001 \*\*p ≤ .01 \*p ≤ .05. + r ≥ .29 (small effect); ++ r ≥ .30 ≥ r ≤ .49 (medium effect); +++ r ≥ .50 (large effect)

Table 7.10 above records that variables correlated significantly ( $r \geq .36 \geq r \geq .96$ ; medium to large practical effect;  $p \leq .05$ ).

The results indicate that total work engagement correlated significantly with vigour ( $r = .92$ ; large effect;  $p \leq .05$ ), dedication ( $r = .93$ ; large effect;  $p \leq .05$ ), and absorption ( $r = .96$ ; large effect;  $p \leq .05$ ) variables.

A positive correlation was observed between total work engagement ( $r = .70$ ; large effect;  $p \leq .05$ ) and total job satisfaction, and between total work engagement ( $r = .55$ ; large effect;  $p \leq .05$ ) and satisfaction with pay. A positive correlation was also observed between total work engagement ( $r = .45$ ; medium effect;  $p \leq .05$ ) and satisfaction with promotion, and between total work engagement ( $r = .52$ ; large effect;  $p \leq .05$ ) and satisfaction with co-workers variables.

A positive correlation was found between total work engagement and satisfaction with supervisor ( $r = .66$ ; large effect;  $p \leq .05$ ), and between total work engagement and satisfaction ( $r = .60$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that total work engagement correlated significantly with total organisational commitment ( $r = .70$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .59$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .67$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .63$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between total work engagement and total OCB ( $r = .64$ ; large effect;  $p \leq .05$ ), altruism ( $r = .61$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .52$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .58$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .58$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .53$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that vigour correlated significantly with dedication ( $r = .77$ ; large effect;  $p \leq .05$ ), and absorption ( $r = .78$ ; large effect;  $p \leq .05$ ). A significant positive correlation was identified between vigour and total job satisfaction ( $r = .64$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .52$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .45$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .41$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .58$ ; large effect;  $p \leq .05$ ), and satisfaction with work itself ( $r = .55$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was found between vigour and total organisational commitment ( $r = .61$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .52$ ; large effect;  $p \leq .05$ ),

continuance commitment ( $r = .57$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .56$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between vigour and total OCB ( $r = .56$ ; large effect;  $p \leq .05$ ), altruism ( $r = .54$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .44$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .52$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .54$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .44$ ; medium effect;  $p \leq .05$ ) variables.

The results also indicated that dedication correlated significantly with absorption ( $r = .92$ ; large effect;  $p \leq .05$ ). A significant positive correlation was established between dedication and total job satisfaction ( $r = .66$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .49$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .41$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .51$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .62$ ; large effect;  $p \leq .05$ ), and satisfaction with work itself ( $r = .56$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was found between dedication and total organisational commitment ( $r = .66$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .57$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .65$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .58$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between dedication and total OCB ( $r = .62$ ; large effect;  $p \leq .05$ ), altruism ( $r = .58$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .51$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .56$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .56$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .53$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between absorption and total job satisfaction ( $r = .68$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .52$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .39$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .54$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .65$ ; large effect;  $p \leq .05$ ), and satisfaction with work itself ( $r = .58$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was noted between absorption and total organisational commitment ( $r = .68$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .57$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .67$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .61$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between dedication and total OCB ( $r = .63$ ; large effect;  $p \leq .05$ ), altruism ( $r = .59$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .52$ ; large

effect;  $p \leq .05$ ), sportsmanship ( $r = .57$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .56$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .53$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that total job satisfaction correlated significantly with satisfaction with pay ( $r = .82$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .78$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .70$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .83$ ; large effect;  $p \leq .05$ ), and satisfaction with work itself ( $r = .82$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was observed between total job satisfaction and total organisational commitment ( $r = .78$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .73$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .71$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .69$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between total job satisfaction and total OCB ( $r = .68$ ; large effect;  $p \leq .05$ ), altruism ( $r = .61$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .51$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .62$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .64$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .62$ ; large effect;  $p \leq .05$ ).

The results indicated that satisfaction with pay correlated significantly with satisfaction with promotion ( $r = .58$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .42$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .62$ ; large effect;  $p \leq .05$ ), and satisfaction with work itself ( $r = .55$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was found between satisfaction with pay and total organisational commitment ( $r = .67$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .64$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .57$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .61$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between satisfaction with pay and total OCB ( $r = .62$ ; large effect;  $p \leq .05$ ), altruism ( $r = .57$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .51$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .55$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .56$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .58$ ; large effect;  $p \leq .05$ ).

The results indicated that satisfaction with promotion correlated significantly with satisfaction with co-workers ( $r = .45$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .54$ ; large effect;  $p \leq .05$ ), and satisfaction with work itself ( $r = .54$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was found between satisfaction with promotion and total organisational commitment ( $r = .58$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .53$ ; large

effect;  $p \leq .05$ ), continuance commitment ( $r = .56$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .48$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between satisfaction with promotion and total OCB ( $r = .51$ ; large effect;  $p \leq .05$ ), altruism ( $r = .45$ ; medium effect;  $p \leq .05$ ), conscientiousness ( $r = .37$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .46$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .48$ ; medium effect;  $p \leq .05$ ) and civic virtue ( $r = .51$ ; large effect;  $p \leq .05$ ).

The results also indicated that satisfaction with co-workers correlated significantly with satisfaction with supervisor ( $r = .46$ ; medium effect;  $p \leq .05$ ), and satisfaction with work itself ( $r = .53$ ; large effect;  $p \leq .05$ ).

A significant positive correlation was found between satisfaction with co-workers and total organisational commitment ( $r = .50$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .45$ ; medium effect;  $p \leq .05$ ), continuance commitment ( $r = .48$ ; medium effect;  $p \leq .05$ ) and normative commitment ( $r = .42$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between satisfaction with co-workers and total OCB ( $r = .42$ ; medium effect;  $p \leq .05$ ), altruism ( $r = .40$ ; medium effect;  $p \leq .05$ ), conscientiousness ( $r = .29$ ; small effect;  $p \leq .05$ ), sportsmanship ( $r = .38$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .40$ ; medium effect;  $p \leq .05$ ) and civic virtue ( $r = .37$ ; medium effect;  $p \leq .05$ ).

A significant positive relationship was identified between satisfaction with supervisor and satisfaction with work itself ( $r = .62$ ; large effect;  $p \leq .05$ ). A significant positive correlation was found between satisfaction with supervisor and total organisational commitment ( $r = .71$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .63$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .62$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .68$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between satisfaction with supervisor and total OCB ( $r = .58$ ; large effect;  $p \leq .05$ ), altruism ( $r = .51$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .47$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .54$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .53$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .51$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between satisfaction with work itself and total organisational commitment ( $r = .61$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .60$ ; large

effect;  $p \leq .05$ ), continuance commitment ( $r = .54$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .52$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between satisfaction with work itself and total OCB ( $r = .52$ ; large effect;  $p \leq .05$ ), altruism ( $r = .46$ ; medium effect;  $p \leq .05$ ), conscientiousness ( $r = .36$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .48$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .55$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .44$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that total organisational commitment correlated significantly with affective commitment ( $r = .89$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .92$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .91$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between total organisational commitment and total OCB ( $r = .84$ ; large effect;  $p \leq .05$ ), altruism ( $r = .74$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .70$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .77$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .76$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .73$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between affective commitment and continuance commitment ( $r = .72$ ; large effect;  $p \leq .05$ ), and normative commitment ( $r = .71$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was also found between affective commitment and total OCB ( $r = .74$ ; large effect;  $p \leq .05$ ), altruism ( $r = .67$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .62$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .65$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .69$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .65$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between continuance commitment and normative commitment ( $r = .74$ ; large effect;  $p \leq .05$ ). Continuance commitment correlated positively with total OCB ( $r = .77$ ; large effect;  $p \leq .05$ ), altruism ( $r = .69$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .64$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .71$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .69$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .68$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between normative commitment and total OCB ( $r = .76$ ; large effect;  $p \leq .05$ ), altruism ( $r = .64$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .65$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .73$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .67$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .65$ ; large effect;  $p \leq .05$ ) variables.

The results indicate that total OCB was correlated with altruism ( $r = .87$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .85$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .91$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .92$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .88$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between total OCB and altruism ( $r = .87$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .85$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .91$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .92$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .88$ ; large effect;  $p \leq .05$ ) variables.

The altruism variable correlated significantly with conscientiousness ( $r = .67$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .70$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .77$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .74$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between conscientiousness and sportsmanship ( $r = .72$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .71$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .67$ ; large effect;  $p \leq .05$ ). A significant positive correlation was also established between sportsmanship and courtesy ( $r = .83$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .78$ ; large effect;  $p \leq .05$ ), while courtesy correlated significantly with the civic virtue ( $r = .74$ ; large effect;  $p \leq .05$ ) variable.

### **7.2.2 Pearson product-moment correlation coefficients (UWES; JSQ; OCS; OCBS)**

Table 7.11

*Bivariate Correlations Between the Ethical Context and Behaviour Variables and Job Retention and Performance-Related Factors*

Variables	Total Work engagement UWES	Vigour (UWES)2	Dedication (UWES)	Absorption (UWES)	Total Job satisfaction (JSQ)	Satisfaction with pay (JSQ)	Satisfaction with promotion (JSQ)	Satisfaction with co-worker (JSQ)	Satisfaction with supervisor (JSQ)	Satisfaction with work itself (JSQ)	Total Organisational commitment	Affective commitment (OCS)	Continuance commitment (OCS)	Normative Commitment (OCS)	Total OCB (OCBQ)	Altruism (OCBQ)	Conscientiousness (OCBQ)	Sportsmanship (OCBQ)	Courtesy (OCBQ)	Civic virtue (OCBQ)
Total ethical culture (CEV)	.77***	.70***	.71***	.74***	.76***	.65***	.56***	.48**	.67***	.62***	.79***	.70***	.74***	.72***	.74***	.65***	.58***	.67***	.68***	.65***
Clarity (CEV)	.69***	.63***	.63***	.66***	.60***	.49**	.44**	.37**	.54***	.50***	.64***	.57***	.61***	.56***	.62***	.58***	.48**	.56***	.54***	.55***
Congruency of supervisor (CEV)	.72***	.64***	.65***	.70***	.73***	.63***	.56***	.43**	.63***	.59***	.74***	.63***	.72***	.67***	.68***	.59***	.54***	.61***	.62***	.61***
Congruency of management (VEV)	.58***	.55***	.53***	.54***	.61***	.55***	.44**	.39**	.49**	.54***	.65***	.62***	.56***	.60***	.59***	.52***	.47**	.56***	.59***	.48**
Feasibility (CEV)	.45**	.50***	.39**	.37**	.35**	.31**	.25*	.15*	.33**	.30**	.31**	.25*	.28*	.30**	.31**	.26**	.24*	.30**	.30**	.22*
Supportability (CEV)	.65***	.57***	.62***	.64***	.64***	.53***	.45**	.45**	.57***	.52***	.66***	.57***	.63***	.58***	.57***	.50***	.44**	.54***	.56***	.48**
Transparency (CEV)	.64***	.56***	.59***	.63***	.65***	.56***	.47**	.38**	.61***	.51***	.69***	.60***	.62***	.64***	.66***	.55***	.55***	.61***	.58***	.60***
Discussability (CEV)	.64***	.55***	.61***	.65***	.66***	.54***	.47**	.46**	.62***	.50***	.72***	.61***	.67***	.68***	.66***	.56***	.52***	.62***	.60***	.58***

Variables	Total Work engagement UWES	Vigour (UWES)2	Dedication (UWES)	Absorption (UWES)	Total Job satisfaction (JSQ)	Satisfaction with pay (JSQ)	Satisfaction with promotion (JSQ)	Satisfaction with co-worker (JSQ)	Satisfaction with supervisor (JSQ)	Satisfaction with work itself (JSQ)	Total Organisational commitment	Affective commitment (OCS)	Continuance commitment (OCS)	Normative Commitment (OCS)	Total OCB (OCBQ)	Altruism (OCBQ)	Conscientiousness (OCBQ)	Sportsmanship (OCBQ)	Courtesy (OCBQ)	Civic virtue (OCBQ)
Sanctionability (CEV)	.59***	.56***	.52***	.56***	.67***	.58***	.55***	.43**	.53***	.57***	.67***	.62***	.65***	.55***	.61***	.60***	.46**	.51***	.59***	.56***
Total ethical climate (ECQ)	.74***	.64***	.73***	.73***	.77***	.60***	.58***	.52***	.69***	.67***	.76***	.73***	.77***	.71***	.73***	.63***	.62***	.66***	.66***	.64***
Caring (ECQ)	.65***	.55***	.63***	.65***	.68***	.52***	.53***	.43**	.61***	.59***	.74***	.64***	.72***	.66***	.66***	.55***	.57***	.60***	.60***	.60***
Law & Code (ECQ)	.69***	.60***	.67***	.67***	.71***	.57***	.53***	.49**	.63***	.56***	.68***	.64***	.63***	.58***	.65***	.58***	.55***	.57***	.58***	.59***
Rules (ECQ)	.50***	.41**	.51***	.50***	.60***	.42**	.44**	.41**	.51***	.57***	.60***	.57***	.54***	.51***	.51***	.43**	.42**	.46**	.44**	.48**
Independence (ECQ)	.60***	.56***	.64***	.66***	.63***	.48**	.41**	.46**	.57***	.55***	.68***	.58***	.67***	.59***	.60***	.58***	.48**	.52***	.53***	.53***
Instrumental (ECQ)	-.57	-.52	-.57	-.53	-.60	-.50	-.47	-.40	-.52	-.49	-.65	-.60	-.60	-.58	-.59	-.51	-.48	-.55	-.57	-.47
Total ethical leadership (ELW)	.75***	.63***	.75***	.74***	.76***	.57***	.52***	.57***	.68***	.64***	.78***	.68***	.74***	.70***	.72***	.62***	.61***	.67***	.67***	.61***
People orientation (ELW)	.55***	.49**	.54***	.53***	.51***	.40**	.39**	.36**	.44**	.44**	.64***	.53***	.60***	.59***	.56***	.50***	.50***	.47**	.42**	.50***
Fairness (ELW)	.46**	.39**	.46**	.45**	.53***	.39**	.36**	.34**	.53***	.45**	.58***	.50***	.52***	.54***	.50***	.39**	.44**	.48**	.49**	.37**

Variables	Total Work engagement (UWES)	Vigour (UWES)2	Dedication (UWES)	Absorption (UWES)	Total Job satisfaction (JSQ)	Satisfaction with pay (JSQ)	Satisfaction with promotion (JSQ)	Satisfaction with co-worker (JSQ)	Satisfaction with supervisor (JSQ)	Satisfaction with work itself (JSQ)	Total Organisational commitment	Affective commitment (OCS)	Continuance commitment (OCS)	Normative Commitment (OCS)	Total OCB (OCBQ)	Altruism (OCBQ)	Conscientiousness (OCBQ)	Sportsmanship (OCBQ)	Courtesy (OCBQ)	Civic virtue (OCBQ)
Power sharing (ELW)	.67***	.58***	.68***	.65***	.66***	.49**	.48**	.54***	.55***	.55***	.68***	.59***	.66***	.60***	.65***	.57***	.51***	.62***	.61***	.54***
Concern for sustainability (ELW)	.55***	.45**	.56***	.55***	.55***	.44**	.41**	.50***	.44**	.42**	.55***	.50***	.54***	.47**	.52***	.49**	.49**	.46**	.46***	.44**
Ethical guidance (ELW)	.66***	.56***	.65***	.66***	.66***	.50***	.40**	.52***	.63***	.57***	.69***	.61***	.65***	.63***	.60***	.52***	.51***	.55***	.58***	.49**
Role clarification (ELW)	.62***	.51***	.66***	.62***	.66***	.52***	.49**	.50***	.58***	.52***	.60***	.54***	.58***	.50***	.62***	.55***	.48**	.58***	.50***	.55***
Integrity (ELW)	.64***	.52***	.60***	.66***	.62***	.43**	.35**	.42**	.60***	.62***	.55***	.46***	.52***	.50***	.54***	.44**	.43**	.55***	.50***	.48**

Notes: N = 839. \*\*\*p ≤ .001 \*\*p ≤ .01 \*p ≤ .05. + r ≥ .29 (small effect); ++ r ≥ .30 ≥ r ≤ .49 (medium effect); +++ r ≥ .50 (large effect)

Table 7.11 above shows that variables correlated significantly ( $r \geq .15$ ;  $r \geq .30$ ;  $r \geq .77$ ; small, medium to large practical effect;  $p \leq .05$ ), and there was a negative correlation ( $r \leq -.40$ ;  $r \leq -.60$ ; medium to large effect;  $p \leq .05$ ) for instrumental ECQ variables.

The correlation results provided a sign that further analyses in the form of canonical correlations analysis and a regression analysis in order to test the research hypotheses were warranted.

#### 7.2.2.1 *Correlations between ethical culture and job retention and performance*

The results indicated that total ethical culture correlated significantly with total work engagement ( $r = .77$ ; large effect;  $p \leq .05$ ), vigour ( $r = .70$ ; large effect;  $p \leq .05$ ), dedication ( $r = .71$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .74$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between total ethical culture and total job satisfaction ( $r = .76$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .65$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .56$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .48$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .67$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .62$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between total ethical culture and total organisational commitment ( $r = .79$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .70$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .74$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .72$ ; large effect;  $p \leq .05$ ) variables.

The total ethical culture correlated significantly with total OCB ( $r = .74$ ; large effect;  $p \leq .05$ ), altruism ( $r = .65$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .58$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .67$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .68$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .65$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that clarity correlated significantly with total work engagement ( $r = .69$ ; large effect;  $p \leq .05$ ), vigour ( $r = .63$ ; large effect;  $p \leq .05$ ), dedication ( $r = .63$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .66$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between clarity and total job satisfaction ( $r = .60$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .49$ ; medium effect;  $p \leq .05$ ), satisfaction with

promotion ( $r = .44$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .37$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .54$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .50$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was identified between clarity and total organisational commitment ( $r = .64$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .57$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .61$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .56$ ; large effect;  $p \leq .05$ ) variables.

Clarity correlated significantly with total OCB ( $r = .62$ ; large effect;  $p \leq .05$ ), altruism ( $r = .58$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .48$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .56$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .54$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .55$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that congruency of supervisor correlated significantly with total work engagement ( $r = .72$ ; large effect;  $p \leq .05$ ), vigour ( $r = .64$ ; large effect;  $p \leq .05$ ), dedication ( $r = .65$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .70$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between congruency of supervisor and total job satisfaction ( $r = .73$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .63$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .56$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .43$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .63$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .59$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between congruency of supervisor and total organisational commitment ( $r = .74$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .63$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .72$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .67$ ; large effect;  $p \leq .05$ ) variables.

Congruency of supervisor correlated significantly with total OCB ( $r = .68$ ; large effect;  $p \leq .05$ ), altruism ( $r = .59$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .54$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .61$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .62$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .61$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that congruency of management correlated significantly with total work engagement ( $r = .58$ ; large effect;  $p \leq .05$ ), vigour ( $r = .55$ ; large effect;  $p \leq .05$ ), dedication ( $r = .53$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .54$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was identified between congruency of management and total job satisfaction ( $r = .61$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .55$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .44$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .39$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .49$ ; medium effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .54$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between congruency of management and total organisational commitment ( $r = .65$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .62$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .56$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .60$ ; large effect;  $p \leq .05$ ) variables.

The congruency of management variable correlated significantly with total OCB ( $r = .59$ ; large effect;  $p \leq .05$ ), altruism ( $r = .52$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .47$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .56$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .59$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .48$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that feasibility correlated significantly with total work engagement ( $r = .45$ ; medium effect;  $p \leq .05$ ), vigour ( $r = .50$ ; large effect;  $p \leq .05$ ), dedication ( $r = .39$ ; medium effect;  $p \leq .05$ ) and absorption ( $r = .37$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between feasibility and total job satisfaction ( $r = .35$ ; medium effect;  $p \leq .05$ ), satisfaction with pay ( $r = .31$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .25$ ; small effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .15$ ; small effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .33$ ; medium effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .30$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was noted between feasibility and total organisational commitment ( $r = .31$ ; medium effect;  $p \leq .05$ ), affective commitment ( $r = .25$ ; small effect;  $p \leq .05$ ), continuance commitment ( $r = .28$ ; small effect;  $p \leq .05$ ) and normative commitment ( $r = .30$ ; medium effect;  $p \leq .05$ ) variables.

The feasibility variable correlated significantly with total OCB ( $r = .31$ ; medium effect;  $p \leq .05$ ), altruism ( $r = .26$ ; small effect;  $p \leq .05$ ), conscientiousness ( $r = .24$ ; small effect;  $p \leq .05$ ), sportsmanship ( $r = .30$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .30$ ; medium effect;  $p \leq .05$ ) and civic virtue ( $r = .22$ ; small effect;  $p \leq .05$ ) variables.

The results indicated that the supportability variable correlated significantly with total work engagement ( $r = .65$ ; large effect;  $p \leq .05$ ), vigour ( $r = .57$ ; large effect;  $p \leq .05$ ), dedication ( $r = .62$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .64$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was identified between supportability and total job satisfaction ( $r = .64$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .53$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .45$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .45$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .57$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .52$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between supportability and total organisational commitment ( $r = .66$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .57$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .63$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .58$ ; large effect;  $p \leq .05$ ) variables.

The supportability variable correlated significantly with total OCB ( $r = .57$ ; large effect;  $p \leq .05$ ), altruism ( $r = .50$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .44$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .54$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .56$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .48$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that transparency correlated significantly with total work engagement ( $r = .64$ ; large effect;  $p \leq .05$ ), vigour ( $r = .56$ ; large effect;  $p \leq .05$ ), dedication ( $r = .59$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .63$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between transparency and total job satisfaction ( $r = .65$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .56$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .47$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .38$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .61$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .51$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between transparency and total organisational commitment ( $r = .69$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .60$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .62$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .64$ ; large effect;  $p \leq .05$ ) variables.

The transparency variable correlated significantly with total OCB ( $r = .66$ ; large effect;  $p \leq .05$ ), altruism ( $r = .55$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .55$ ; large effect;  $p \leq .05$ ),

sportsmanship ( $r = .61$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .58$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .60$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that discussability correlated significantly with total work engagement ( $r = .64$ ; large effect;  $p \leq .05$ ), vigour ( $r = .55$ ; large effect;  $p \leq .05$ ), dedication ( $r = .61$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .65$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was noted between discussability and total job satisfaction ( $r = .66$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .54$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .47$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .46$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .62$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .50$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between discussability and total organisational commitment ( $r = .72$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .61$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .67$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .68$ ; large effect;  $p \leq .05$ ) variables.

The discussability variable correlated significantly with total OCB ( $r = .66$ ; large effect;  $p \leq .05$ ), altruism ( $r = .56$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .52$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .62$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .60$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .58$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that sanctionability correlated significantly with total work engagement ( $r = .59$ ; large effect;  $p \leq .05$ ), vigour ( $r = .56$ ; large effect;  $p \leq .05$ ), dedication ( $r = .52$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .56$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between sanctionability and total job satisfaction ( $r = .67$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .58$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .55$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .43$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .53$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .57$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was identified between sanctionability and total organisational commitment ( $r = .67$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .62$ ; large

effect;  $p \leq .05$ ), continuance commitment ( $r = .65$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .55$ ; large effect;  $p \leq .05$ ) variables.

The sanctionability variable correlated significantly with total OCB ( $r = .61$ ; large effect;  $p \leq .05$ ), altruism ( $r = .60$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .46$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .51$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .59$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .56$ ; large effect;  $p \leq .05$ ) variables.

#### 7.2.2.2 *Correlations between ethical climate and job retention and performance*

The results indicated that total ethical climate correlated significantly with total work engagement ( $r = .74$ ; large effect;  $p \leq .05$ ), vigour ( $r = .64$ ; large effect;  $p \leq .05$ ), dedication ( $r = .73$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .73$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between total ethical climate and total job satisfaction ( $r = .77$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .60$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .58$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .52$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .69$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .67$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between total ethical climate and total organisational commitment ( $r = .76$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .73$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .77$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .71$ ; large effect;  $p \leq .05$ ) variables

The total ethical climate correlated significantly with total OCB ( $r = .73$ ; large effect;  $p \leq .05$ ), altruism ( $r = .63$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .62$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .66$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .66$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .64$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that caring correlated significantly with total work engagement ( $r = .65$ ; large effect;  $p \leq .05$ ), vigour ( $r = .55$ ; large effect;  $p \leq .05$ ), dedication ( $r = .63$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .65$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between caring and total job satisfaction ( $r = .68$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .52$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .53$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .43$ ; medium effect;

$p \leq .05$ ), satisfaction with supervisor ( $r = .61$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .59$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between caring and total organisational commitment ( $r = .74$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .64$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .72$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .66$ ; large effect;  $p \leq .05$ ) variables.

The caring variable correlated significantly with total OCB ( $r = .66$ ; large effect;  $p \leq .05$ ), altruism ( $r = .55$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .57$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .60$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .60$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .60$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that law and codes correlated significantly with total work engagement ( $r = .69$ ; large effect;  $p \leq .05$ ), vigour ( $r = .60$ ; large effect;  $p \leq .05$ ), dedication ( $r = .67$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .67$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between law and codes and total job satisfaction ( $r = .71$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .57$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .53$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .49$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .63$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .56$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between law and codes and total organisational commitment ( $r = .68$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .64$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .63$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .58$ ; large effect;  $p \leq .05$ ) variables.

The law and codes variable correlated significantly with total OCB ( $r = .65$ ; large effect;  $p \leq .05$ ), altruism ( $r = .58$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .55$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .57$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .58$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .59$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that the rules variable correlated significantly with total work engagement ( $r = .50$ ; large effect;  $p \leq .05$ ), vigour ( $r = .41$ ; medium effect;  $p \leq .05$ ), dedication ( $r = .51$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .50$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between rules and total job satisfaction ( $r = .60$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .42$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .44$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .41$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .51$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .57$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between rules and total organisational commitment ( $r = .60$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .57$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .54$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .51$ ; large effect;  $p \leq .05$ ) variables.

The rules variable correlated significantly with total OCB ( $r = .51$ ; large effect;  $p \leq .05$ ), altruism ( $r = .43$ ; medium effect;  $p \leq .05$ ), conscientiousness ( $r = .42$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .46$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .44$ ; medium effect;  $p \leq .05$ ) and civic virtue ( $r = .48$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that the independence variable correlated significantly with total work engagement ( $r = .60$ ; large effect;  $p \leq .05$ ), vigour ( $r = .56$ ; large effect;  $p \leq .05$ ), dedication ( $r = .64$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .66$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was noted between independence and total job satisfaction ( $r = .63$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .48$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .41$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .46$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .57$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .55$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between independence and total organisational commitment ( $r = .68$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .58$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .67$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .59$ ; large effect;  $p \leq .05$ ) variables.

The independence variable correlated significantly with total OCB ( $r = .60$ ; large effect;  $p \leq .05$ ), altruism ( $r = .58$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .48$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .52$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .53$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .53$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that the instrument variable correlated significantly and negatively with total work engagement ( $r = -.57$ ; large effect;  $p \leq .05$ ), vigour ( $r = -.52$ ; large effect;  $p \leq .05$ ), dedication ( $r = -.57$ ; large effect;  $p \leq .05$ ) and absorption ( $r = -.53$ ; large effect;  $p \leq .05$ ) variables.

A significant negative correlation was identified between the instrument variable and total job satisfaction ( $r = -.60$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = -.50$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = -.47$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = -.40$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = -.52$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = -.49$ ; medium effect;  $p \leq .05$ ) variables.

A significant negative correlation was found between the instrument variable and total organisational commitment ( $r = -.65$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = -.60$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = -.60$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = -.58$ ; large effect;  $p \leq .05$ ) variables.

The instrument variable correlated significantly and negatively with total OCB ( $r = -.59$ ; large effect;  $p \leq .05$ ), altruism ( $r = -.51$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = -.48$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = -.55$ ; large effect;  $p \leq .05$ ), courtesy ( $r = -.57$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = -.47$ ; medium effect;  $p \leq .05$ ) variables.

#### 7.2.2.3 *Correlations between ethical leadership and job retention and performance*

The results indicated that total ethical leadership correlated significantly with total work engagement ( $r = .75$ ; large effect;  $p \leq .05$ ), vigour ( $r = .63$ ; large effect;  $p \leq .05$ ), dedication ( $r = .75$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .74$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between total ethical leadership and total job satisfaction ( $r = .76$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .57$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .52$ ; large effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .57$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .68$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .64$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between total ethical leadership and total organisational commitment ( $r = .78$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .68$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .74$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .70$ ; large effect;  $p \leq .05$ ) variables.

Total ethical leadership correlated significantly with total OCB ( $r = .72$ ; large effect;  $p \leq .05$ ), altruism ( $r = .62$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .61$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .67$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .67$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .61$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that the people orientation variable correlated significantly with total work engagement ( $r = .55$ ; large effect;  $p \leq .05$ ), vigour ( $r = .49$ ; medium effect;  $p \leq .05$ ), dedication ( $r = .54$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .53$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was noted between the people orientation variable and total job satisfaction ( $r = .51$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .40$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .39$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .36$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .44$ ; medium effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .44$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between people orientation and total organisational commitment ( $r = .64$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .53$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .60$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .59$ ; large effect;  $p \leq .05$ ) variables.

The people orientation variable correlated significantly with total OCB ( $r = .56$ ; large effect;  $p \leq .05$ ), altruism ( $r = .50$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .50$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .47$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .42$ ; medium effect;  $p \leq .05$ ) and civic virtue ( $r = .50$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that the fairness variable correlated significantly with total work engagement ( $r = .46$ ; medium effect;  $p \leq .05$ ), vigour ( $r = .39$ ; medium effect;  $p \leq .05$ ), dedication ( $r = .46$ ; medium effect;  $p \leq .05$ ) and absorption ( $r = .45$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between fairness and total job satisfaction ( $r = .53$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .39$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .36$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .34$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .53$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .45$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between fairness and total organisational commitment ( $r = .58$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .50$ ; large effect;  $p \leq .05$ ),

continuance commitment ( $r = .52$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .54$ ; large effect;  $p \leq .05$ ) variables.

The fairness variable correlated significantly with total OCB ( $r = .50$ ; large effect;  $p \leq .05$ ), altruism ( $r = .39$ ; medium effect;  $p \leq .05$ ), conscientiousness ( $r = .44$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .48$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .49$ ; medium effect;  $p \leq .05$ ) and civic virtue ( $r = .37$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that the power sharing variable correlated significantly with total work engagement ( $r = .67$ ; large effect;  $p \leq .05$ ), vigour ( $r = .58$ ; large effect;  $p \leq .05$ ), dedication ( $r = .68$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .65$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was identified between power sharing and total job satisfaction ( $r = .66$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .49$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .48$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .54$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .55$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .55$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between power sharing and total organisational commitment ( $r = .68$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .59$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .66$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .60$ ; large effect;  $p \leq .05$ ) variables.

The power sharing variable correlated significantly with total OCB ( $r = .65$ ; large effect;  $p \leq .05$ ), altruism ( $r = .57$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .51$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .62$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .61$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .54$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that concern for sustainability correlated significantly with total work engagement ( $r = .55$ ; large effect;  $p \leq .05$ ), vigour ( $r = .45$ ; medium effect;  $p \leq .05$ ), dedication ( $r = .56$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .55$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between concern for sustainability and total job satisfaction ( $r = .55$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .44$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .41$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .50$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .44$ ; medium effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .42$ ; medium effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between concern for sustainability and total organisational commitment ( $r = .55$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .50$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .54$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .47$ ; medium effect;  $p \leq .05$ ) variables.

The concern for sustainability variable correlated significantly with total OCB ( $r = .52$ ; large effect;  $p \leq .05$ ), altruism ( $r = .49$ ; medium effect;  $p \leq .05$ ), conscientiousness ( $r = .49$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .46$ ; medium effect;  $p \leq .05$ ), courtesy ( $r = .46$ ; medium effect;  $p \leq .05$ ) and civic virtue ( $r = .44$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that the ethical guidance variable correlated significantly with total work engagement ( $r = .66$ ; large effect;  $p \leq .05$ ), vigour ( $r = .56$ ; large effect;  $p \leq .05$ ), dedication ( $r = .65$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .66$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was noted between ethical guidance and total job satisfaction ( $r = .66$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .50$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .40$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .52$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .63$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .57$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was observed between ethical guidance and total organisational commitment ( $r = .69$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .61$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .65$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .63$ ; large effect;  $p \leq .05$ ) variables.

The ethical guidance variable correlated significantly with total OCB ( $r = .60$ ; large effect;  $p \leq .05$ ), altruism ( $r = .52$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .51$ ; large effect;  $p \leq .05$ ), sportsmanship ( $r = .55$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .58$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .49$ ; medium effect;  $p \leq .05$ ) variables.

The results indicated that role clarification correlated significantly with total work engagement ( $r = .62$ ; large effect;  $p \leq .05$ ), vigour ( $r = .51$ ; large effect;  $p \leq .05$ ), dedication ( $r = .66$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .62$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was found between role clarification and total job satisfaction ( $r = .66$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .52$ ; large effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .49$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .50$ ; large effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .58$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .52$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was identified between role clarification and total organisational commitment ( $r = .60$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .54$ ; large effect;  $p \leq .05$ ), continuance commitment ( $r = .58$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .50$ ; large effect;  $p \leq .05$ ) variables.

The role clarification variable correlated significantly with total OCB ( $r = .62$ ; large effect;  $p \leq .05$ ), altruism ( $r = .55$ ; large effect;  $p \leq .05$ ), conscientiousness ( $r = .48$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .58$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .50$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .55$ ; large effect;  $p \leq .05$ ) variables.

The results indicated that the integrity variable correlated significantly with total work engagement ( $r = .64$ ; large effect;  $p \leq .05$ ), vigour ( $r = .52$ ; large effect;  $p \leq .05$ ), dedication ( $r = .60$ ; large effect;  $p \leq .05$ ) and absorption ( $r = .66$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was established between the integrity variable and total job satisfaction ( $r = .62$ ; large effect;  $p \leq .05$ ), satisfaction with pay ( $r = .43$ ; medium effect;  $p \leq .05$ ), satisfaction with promotion ( $r = .35$ ; medium effect;  $p \leq .05$ ), satisfaction with co-workers ( $r = .42$ ; medium effect;  $p \leq .05$ ), satisfaction with supervisor ( $r = .60$ ; large effect;  $p \leq .05$ ) and satisfaction with work itself ( $r = .62$ ; large effect;  $p \leq .05$ ) variables.

A significant positive correlation was noted between integrity and total organisational commitment ( $r = .55$ ; large effect;  $p \leq .05$ ), affective commitment ( $r = .46$ ; medium effect;  $p \leq .05$ ), continuance commitment ( $r = .52$ ; large effect;  $p \leq .05$ ) and normative commitment ( $r = .50$ ; large effect;  $p \leq .05$ ) variables.

The integrity variable correlated significantly with total OCB ( $r = .54$ ; large effect;  $p \leq .05$ ), altruism ( $r = .44$ ; medium effect;  $p \leq .05$ ), conscientiousness ( $r = .43$ ; medium effect;  $p \leq .05$ ), sportsmanship ( $r = .55$ ; large effect;  $p \leq .05$ ), courtesy ( $r = .50$ ; large effect;  $p \leq .05$ ) and civic virtue ( $r = .48$ ; medium effect;  $p \leq .05$ ) variables.

The correlations result provided supportive evidence for the research hypothesis Ha1: There is supportive significant positive interrelationship between the ethical context and behaviour (conceptualised as ethical culture, ethical climate, and ethical leadership) and the job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB).

### **7.3 INFERENTIAL (MULTIVARIATE) STATISTICS**

Inferential (multivariate) statistics comprise of techniques that assist the researcher to study samples and then make generalisations about the populations from which the samples were drawn (Hair et al., 2010). The following section discusses five steps: (1) canonical correlational analysis, (2) standard multiple regression analysis, (3) structural equation modelling, (4) hierarchical moderated regression analysis, and (5) tests for significant mean differences

#### **7.3.1 Canonical correlation analysis**

A canonical correlation analysis was performed to assess the overall relationship between the ethical context and behaviour variables construct as a composite set of independent latent variables (conceptualised as ethical culture, ethical climate and ethical leadership), and job retention and performance as a composite set of dependent latent variables (conceptualised as work engagement, job satisfaction, organisational commitment and OCB).

As Table 7.12 below shows, the canonical correlation model had eight canonical functions (dimensions), of which the canonical correlations of only the first six functions were statistically significant. The full model  $r^2$  type effect size (yielded by  $1-\lambda: 1-.03$ ) is .97 (large practical effect), indicating that the overall model explained a substantial portion (about 97%) of the variance shared between the two sets of variables. The overall canonical correlation in Table 7.12 shows that the relationship between the two canonical variate constructs is fairly strong ( $R_c = .93$ ). The canonical variables of the first function accounted for 87% of the data variability. Only the results of the first canonical correlation will be considered for testing of research hypothesis Ha2, because the second function only explained an additional 37%, the third function only 31 %, the fourth function 27%, the fifth function 19%, the sixth function 13%, the seventh function 9%, and the eighth function 7% of the variance shared between the two sets of variables.

Table 7.12

*Canonical Correlation Analysis – Ethical Context and Behaviour Variables and Job Retention and Performance-Related Factors Model Fit Statistics*

Measures of overall model fit for canonical correlation analysis				
Canonical function	Overall canonical correlation (Rc)	Overall squared canonical correlation (Rc <sup>2</sup> )	F statistics	Probability (p)
1	.93	.87	13.75	<.0001***
2	.57	.37	7.82	<.0001***
3	.53	.31	6.36	<.0001***
4	.50	.27	5.60	<.0001***
5	.40	.19	4.85	<.0001***
6	.35	.13	3.49	<.0001***
7	.28	.09	2.87	<.0001***
8	.24	.07	2.33	<.0001***
Multivariate tests of significance				
Statistic		Value	Approximate F statistic	Probability(p)
Wilks' Lambda		.03	13.75	<.0001***
Pillai's Trace		3.06	9.49	<.0001***
Hotelling-Lawley Trace		9.91	24.38	<.0001***
Roy's Greatest Root		6.96	270.70	<.0001***

Notes: N = 409. \*\*\*p ≤ .001 \*\*p ≤ .01 \*p ≤ .05

The redundancy index results presented in Table 7.12 above show that although the ethical context and behaviour variables canonical construct variables accounted for 87% ( $Rc^2 = .87$ ; large practical effect) of the proportion of variance in the job retention and performance canonical construct variables, the ethical context and behaviour construct variables were able to predict only 3% (small effect) of the variance in the individual original job retention and performance canonical construct variables.

The ethical context and behaviour canonical construct variables contributed significantly towards explaining the variance in the sixteen original job retention and performance construct (work engagement, job satisfaction, organisational commitment and OCB) variables: in other words vigour (52%); dedication (65%); and absorption (66%); satisfaction with pay (43%); satisfaction with promotion (34%); satisfaction with co-workers (34%); satisfaction with supervisor (55%); satisfaction with work itself (49%); affective commitment (53%); continuance commitment (63%); normative commitment (53%); altruism (47%); conscientiousness (39%); sportsmanship (50%); courtesy (53%) and civic virtue (43%) exhibited the highest correlation with the job retention and performance-related factors.

The CEV congruency of supervisor ( $R_c = .79$ ), discussability ( $R_c = .73$ ), supportability and transparency ( $R_c = .71$ ), and clarity ( $R_c = .70$ ) variables, the ECQ caring ( $R_c = .76$ ), law and code ( $R_c = .76$ ), and independence ( $R_c = .72$ ) variables, and the ELWQ power sharing ( $R_c = .76$ ), ethical guidance ( $R_c = .75$ ), and role clarification ( $R_c = .72$ ) variables exhibited the highest correlation with the canonical job retention and performance-related factors construct variate. The congruency of supervisor ( $R_c = .84$ ), discussability ( $R_c = .79$ ), supportability and transparency ( $R_c = .76$ ), and clarity ( $R_c = .74$ ) variables, the ECQ caring, law and code ( $R_c = .81$ ), and independence ( $R_c = .77$ ) variables, and the ELWQ power sharing ( $R_c = .81$ ), ethical guidance ( $R_c = .80$ ), and role clarification ( $R_c = .77$ ) variables were the strongest predictors of the ethical context and behaviour variables canonical construct variate. UWES dedication ( $R_c = .81$ ), absorption ( $R_c = .81$ ), JSQ satisfaction with supervisor ( $R_c = .74$ ), satisfaction with work itself ( $R_c = .70$ ); OCS affective commitment and normative commitment ( $R_c = .73$ ), continuance commitment ( $R_c = .79$ ) and OCBQ altruism ( $R_c = .68$ ), sportsmanship ( $R_c = .71$ ), and courtesy ( $R_c = .73$ ) variables exhibited the highest correlation with the canonical ethical context and behaviour variables canonical construct variate. (Absorption:  $R_c = .87$ ; dedication:  $R_c = .86$ ; continuance commitment:  $R_c = .85$ ; satisfaction with supervisor:  $R_c = .79$ ; affective commitment:  $R_c = .78$ ; normative commitment:  $R_c = .78$ ; courtesy:  $R_c = .78$ ; satisfaction with work itself:  $R_c = .75$ ; sportsmanship:  $R_c = .75$  and altruism:  $R_c = .73$ .)

Table 7.13

*Standardised Canonical Correlation Analysis Results for the First Canonical Function Variate*

Variate/Variables	Canonical coefficient (weight)	Structure coefficient (canonical loading) (Rc)	Canonical cross-loadings (Rc)	Squared multiple correlation (Rc <sup>2</sup> )
Ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) canonical variate (independent variables)				
Clarity (CEV)	.01	.75	.70	.49
Congruency of supervisor (CEV)	.10	.84	.79	.62
Congruency of management (CEV)	.04	.71	.66	.44
Feasibility (CEV)	.06	.42	.40	.16
Supportability (CEV)	.18	.76	.71	.51
Transparency (CEV)	.19	.76	.71	.51
Discussability (CEV)	.11	.79	.73	.54
Sanctionability (CEV)	.05	.74	.69	.48
Caring (ECQ)	.17	.81	.76	.57
Law & codes (ECQ)	.23	.82	.76	.58
Rules (ECQ)	-.03	.66	.62	.38
Independence (ECQ)	.06	.77	.72	.52
Instrument (ECQ)	-.07	.71	.67	.44
People orientation (ELWQ)	.03	.66	.61	.38
Fairness (ELWQ)	.01	.61	.57	.33
Power sharing (ELWQ)	.06	.81	.76	.57
Concern for sustainability (ELWQ)	.02	.65	.61	.37
Ethical guidance (ELWQ)	.11	.80	.75	.56
Role clarification (ELWQ)	.17	.77	.72	.51
Integrity (ELWQ)	.15	.73	.68	.46
Percentage of overall variance of variables explained by their own canonical variables: .53				
Job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB) canonical variate (dependent variables)				
Vigour (UWES)	.05	.77	.72	.52
Dedication (UWES)	.22	.86	.81	.65
Absorption (UWES)	.14	.87	.81	.66
Satisfaction with pay (JSQ)	.05	.70	.66	.43
Satisfaction with promotion (JSQ)	.06	.63	.59	.34
Satisfaction with co-worker (JSQ)	.07	.63	.59	.34
Satisfaction with supervisor (JSQ)	.13	.79	.74	.55
Satisfaction with work itself (JSQ)	.12	.75	.70	.49
Affective commitment (OCS)	.05	.78	.73	.53
Continuance commitment (OCS)	.18	.85	.79	.63
Normative commitment (OCS)	.02	.78	.73	.53
Altruism (OCBQ)	-.02	.73	.68	.47
Conscientiousness (OCBQ)	.03	.66	.62	.39
Sportsmanship (OCBQ)	.06	.75	.71	.50
Courtesy (OCBQ)	.12	.78	.73	.53
Civic virtue (OCBQ)	-.01	.70	.66	.43
Percentage of overall variance of variables explained by their own canonical variables: .57				
Overall model fit measures (function 1):				
Overall Rc <sup>2</sup> = .87 (percentage of overall variance in the ethical context and behaviour canonical construct variables accounted for by the job retention and performance canonical construct variables)				
F(p) = 13.75 (p < .0001); df = (320; 9943.2)				
Wilk's lambda (λ) = .03				
r <sup>2</sup> type effect size: 1 - λ = .97 (large effect)				
Overall proportion: .70				
Redundancy index (overall variance of the job retention and performance explained or predicted by the ethical context and behaviour variables): proportion = .56				

Note: N = 839. \*\*\*p ≤ 0.001    \*\*p ≤ 0.01    \*p ≤ 0.05

The results of the canonical correlation provided supportive evidence for the research hypothesis Ha2: The ethical context and behaviour variables variate (conceptualised as ethical culture, ethical climate and ethical leadership), as a composite set of independent variables, significantly and positively relates to the job retention and performance variate (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), as a composite set of dependent latent variables.

### **7.3.2 Standard multiple linear regression analysis**

Standard multiple linear regression analysis was performed to test the hypothesis Ha3: the ethical context and behaviour, conceptualised as ethical culture, ethical climate and ethical leadership, positively predict job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. The F-test was used to test whether there was significant regression between the independent (ethical culture, ethical climate and ethical leadership) and dependent variables (work engagement, job satisfaction, organisational commitment and OCB).

Collinearity diagnosis was investigated to ensure that zero-order correlations were below the level of multicollinearity concern ( $r \geq .90$ ), that the variance inflation factors did not exceed 10, that the condition index was below 15, and that the tolerance values were close to 1.0 (Cohen et al., 2011). In order to counter the probability of a type I error, the significant value was set at the 95% confidence interval level ( $F_p \leq .05$ ).

#### *7.3.2.1 Regression: ethical culture as a predictor of the job retention and performance*

Table 7.14 below summarises the significant results of the multiple regression analyses that were performed to determine whether or not ethical culture acted as a predictor of job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Table 7.14 shows that four regression models were used, one model for each of the job retention and performance. All four models were statistically significant ( $F_p \leq .05$ ). The models accounted for 61% ( $R^2 = .61$ : work engagement); 62% ( $R^2 = .62$ : job satisfaction); 67% ( $R^2 = .67$ : organisational commitment); and 56% ( $R^2 = .56$ : OCB) of the variance in the ethical culture variables. The results are large in practical effect size.

Table 7.14

*Multiple regression analysis: ethical culture as a predictor of job retention and performance*

Predictor variables	Model 1 Work engagement			Model 2 Job satisfaction			Model 3 Organisational commitment			Model 4 OCB		
	B	SEB	β	B	SEB	β	B	SEB	β	B	SEB	β
Intercept	-10.48	1.68		19.88	2.19		22.76	2.54		28.74	2.85	
Clarity	.32	.05	.23***	-.20	.07	-.11**	-.11	.08	-.05	.06	.09	.02
Congruency of management	.05	.10	.02	.84	.11	.33***	.86	.12	.27***	.66	.14	.21***
Congruency of supervisor	.05	.08	.23***	.39	.13	.10**	.73	.15	.15***	.63	.17	.13***
Feasibility	.40	.06	.17***	.09	.07	.03	-.12	.09	-.03	-.00	.10	-.00
supportability	.34	.07	.17***	.32	.09	.12**	.28	.11	.09**	-.09	.12	-.03
Transparency	-.14	.07	-.09*	.17	.09	.08	.28	.11	.10**	.50	.12	.19***
Discussability	.19	.05	.15***	.20	.07	.11**	.49	.08	.22***	.35	.08	.17***
Sanctionability	.16	.05	.10**	.57	.06	.27***	.49	.08	.19***	.43	.08	.17***
<b>Models</b>												
R	R = .61			R = .62			R = .67			R = .56		
Adjusted R Square	R <sup>2</sup> = .61+++			R <sup>2</sup> = .61+++			R <sup>2</sup> = .66+++			R <sup>2</sup> = .55+++		
F (df; Mean square)	F(8;3987.81) = 162.77			F(8;6992.39) = 167.63			F(8;11439) = 205.19			F(8;9177.15) = 129.21		

Notes: N =839; \*\*\*p ≤ .001 – statistically significant. \*\*p ≤ .01-statistically significant. \*p ≤ .05-statistically significant.

+R<sup>2</sup> ≤ 0.12 (small practical effect size). ++R<sup>2</sup> ≥ 0.13≤0.25 (medium practical effect size), +++R<sup>2</sup> ≥ 0.26 (large practical effect size).

In model 1 (work engagement), clarity ( $\beta = .23$ ;  $p = .00$ ), feasibility ( $\beta = .17$ ;  $p = .00$ ), supportability ( $\beta = .17$ ;  $p = .00$ ), discussability ( $\beta = .15$ ;  $p = .00$ ), sanctionability ( $\beta = .10$ ;  $p = .01$ ), congruency of supervisor ( $\beta = .23$ ;  $p = .00$ ), and transparency ( $\beta = -.09$ ;  $p = .04$ ) acted as significant positive predictors of work engagement, with clarity, feasibility, supportability, discussability, sanctionability and congruency of supervisor contributing the most towards explaining the variance in work engagement variables.

In model 2 (job satisfaction), congruency of management ( $\beta = .33$ ;  $p = .00$ ), sanctionability ( $\beta = .27$ ;  $p = .00$ ), supportability ( $\beta = .12$ ;  $p = .01$ ), discussability ( $\beta = .11$ ;  $p = .02$ ), congruency of supervisor ( $\beta = .10$ ;  $p = .00$ ), and clarity ( $\beta = -.11$ ;  $p = .03$ ) acted as significant positive predictors of job satisfaction, with congruency of management, sanctionability, supportability, discussability, congruency of supervisor and clarity contributing the most towards explaining the variance in the job satisfaction variable.

In model 3 (organisational commitment), congruency of management ( $\beta = .33$ ;  $p = .00$ ), discussability ( $\beta = .27$ ;  $p = .00$ ), sanctionability ( $\beta = .12$ ;  $p = .01$ ), congruency of supervisor ( $\beta = .11$ ;  $p = .02$ ), transparency ( $\beta = .10$ ;  $p = .00$ ), and supportability ( $\beta = -.11$ ;  $p = .03$ ) acted as significant positive predictors of organisational commitment, with congruency of management, discussability, sanctionability, congruency of supervisor, and transparency and supportability contributing the most towards explaining the variance in the organisational commitment variable.

In model 4 (OCB), congruency of management ( $\beta = .21$ ;  $p = .00$ ), transparency ( $\beta = .19$ ;  $p = .00$ ), discussability ( $\beta = .17$ ;  $p = .00$ ), sanctionability ( $\beta = .17$ ;  $p = .00$ ), and congruency of supervisor ( $\beta = .13$ ;  $p = .02$ ) acted as significant positive predictors of organisational commitment, with congruency of management, transparency, discussability, sanctionability and congruency of supervisor contributing the most towards explaining the variance in the organisational commitment variable.

#### *7.3.2.2 Regression results: ethical climate as a predictor of job retention and performance*

Table 7.15 below summarises the significant results of the multiple regression analyses that were performed to assess whether or not ethical climate acted as a predictor of job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Table 7.15 shows that four regression models were used, one model for each of the job retention and performance-related factors. All four models were

statistically significant ( $F_p \leq .05$ ). The models accounted for 60% ( $R^2 = .60$ : work engagement); 59% ( $R^2 = .59$ : job satisfaction); 67% ( $R^2 = .67$ : organisational commitment); and 55% ( $R^2 = .55$ : OCB) of the variance in the ethical climate variables. The results are large in practical effect size.

Table 7.15

*Multiple Regression Analysis: Ethical Climate as a Predictor of Job Retention and Performance*

Predictor variables	Model 5 Work engagement			Model 6 Job satisfaction			Model 7 Organisational commitment			Model 8 OCB		
	B	SEB	$\beta$	B	SEB	$\beta$	B	SEB	$\beta$	B	SEB	$\beta$
Intercept	-.85	1.40		1.02	.09		.81	.09		1.23	.09	
Caring	.07	.03	.08*	.01	.02	.17***	.02	.00	.32***	.01	.00	.23***
Law and codes	.65	.05	.42***	.03	.03	.34***	.02	.00	.19***	.03	.00	.40***
Rules	.21	.10	.07*	.02	.01	.09*	.01	.01	.04	-.01	.01	-.04
Independence	.73	.08	.32***	.02	.01	.16***	.02	.01	.17***	.02	.01	.15***
Instrument	-1.80	.40	-.14***	-.15	.03	-.17***	-.21	.02	-.24***	-.19	.03	-.22***
<b>Model.</b>												
R	R = .60			R = .60			R = .66			R = .55		
R <sup>2</sup>	R <sup>2</sup> = .59+++			R <sup>2</sup> = .60+++			R <sup>2</sup> = .66+++			R <sup>2</sup> = .54+++		
F (df; Mean square)	F(5;6276.15) = 245.26			F(5;27.773) = 255.31			F(5;32.282) = 330.62			F(5;24.965) = 199.03		

Notes: N = 839; \*\*\*p ≤ .001 – statistically significant. \*\*p ≤ .01 – statistically significant. \*p ≤ .05 – statistically significant.

+R<sup>2</sup> ≤ 0.12 (small practical effect size), ++R<sup>2</sup> ≥ 0.13 ≤ 0.25 (medium practical effect size), +++R<sup>2</sup> ≥ 0.26 (large practical effect size)

In model 5 (work engagement), law and codes ( $\beta = .42$ ;  $p = 00$ ), independence ( $\beta = .32$ ;  $p = 00$ ), instrument ( $\beta = -.14$ ;  $p = 00$ ), caring ( $\beta = .08$ ;  $p = 01$ ) and rules ( $\beta = .07$ ;  $p = 01$ ) acted as significant positive predictors of work engagement, with law and codes, independence, instrument, caring and rules contributing the most towards explaining the variance in the work engagement variable.

In model 6 (job satisfaction), law and codes ( $\beta = .34$ ;  $p = 00$ ), caring ( $\beta = .17$ ;  $p = 00$ ), instrument ( $\beta = -.17$ ;  $p = 00$ ), independence ( $\beta = .16$ ;  $p = 00$ ) and rules ( $\beta = .09$ ;  $p = 01$ ) acted as significant positive predictors of job satisfaction, with law and codes, caring, instrument, independence, and rules contributing the most towards explaining the variance in the job satisfaction variable.

In model 7 (organisational commitment), caring ( $\beta = .32$ ;  $p = 00$ ), instrument ( $\beta = -.24$ ;  $p = 00$ ), law and codes ( $\beta = .19$ ;  $p = 00$ ), and independence ( $\beta = .17$ ;  $p = 00$ ) acted as significant positive predictors of organisational commitment, with caring, instrument, law and codes, and independence contributing the most towards explaining the variance in the organisational commitment variable.

In model 8 (OCB), law and codes ( $\beta = .40$ ;  $p = 00$ ), caring ( $\beta = .23$ ;  $p = 00$ ), instrument ( $\beta = -.22$ ;  $p = 00$ ), and independence ( $\beta = .15$ ;  $p = 00$ ) acted as significant positive predictors of OCB, with caring, instrument, law and codes, and independence contributing the most towards explaining the variance in the organisational commitment variable.

### 7.3.2.3 Regression: Ethical Leadership as a Predictor of Job Retention and Performance

Table 7.16 below summarises the significant results of the multiple regression analyses that were performed to determine whether or not ethical leadership acted as a predictor of job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and OCB. Table 7.16 shows that four regression models were used, one model for each of the job retention and performance-related factors. All four models were statistically significant ( $F_p \leq .05$ ). The models accounted for 62% ( $R^2 = .62$ : work engagement); 60% ( $R^2 = .60$ : job satisfaction); 62% ( $R^2 = .62$ : organisational commitment); and 55% ( $R^2 = .55$ : OCB) of the variance in the ethical leadership variables. The results are large in practical effect size.

Table 7.16

*Multiple Regression Analysis: Ethical Leadership as a Predictor of Job Retention and Performance-Related Factors*

Predictor variables	Model 9 work engagement			Model 10 Job satisfaction			Model 11 Organisational commitment			Model 12 OCB		
	B	SEB	β	B	SEB	β	B	SEB	β	B	SEB	β
Intercept	-3.69	1.41		20.91	1.88		20.85	2.28		27.97	2.42	
People orientation	.28	.05	.15***	.13	.07	.05	.72	.09	.24***	.53	.09	.18***
Fairness	.23	.06	.11**	.14	.08	.05	.31	.10	.09**	.10	.11	.03
Power sharing	.48	.08	.23***	.43	.11	.16***	.55	.13	.16***	.76	.14	.23***
Concern for sustainability	.29	.11	.08*	.32	.15	.07*	-.04	.18	-.01	.20	.19	.04
Ethical guidance	.30	.07	.16***	.47	.09	.19***	.69	.11	.23***	.20	.12	.07
Role clarification	.29	.07	.13***	.77	.10	.26***	.68	.12	.19***	.94	.12	.26***
Integrity	.96	.10	.31***	.75	.13	.18***	.38	.16	.08*	.57	.17	.12**
<b>Model</b>												
R	R = .62			R = .60			R = .62			R = .55		
R <sup>2</sup>	R <sup>2</sup> = .61+++			R <sup>2</sup> = .60+++			R <sup>2</sup> = .62+++			R <sup>2</sup> = .55+++		
F (df; Mean square)	F(7;4624.62) = 189.95			F(7;7880.81) = 180.43			F (7;12363) = 194.71			F (7;10394) = 143.72		

Notes: N = 839; \*\*\*p ≤ .001 – statistically significant. \*\*p ≤ .01, – statistically significant. \*p ≤ .05, – statistically significant.

+R<sup>2</sup> ≤ 0.12 (small practical effect size), ++R<sup>2</sup> ≥ 0.13 ≤ 0.25 (medium practical effect size), +++R<sup>2</sup> ≥ 0.26 (large practical effect size).

In model 9 (work engagement), integrity ( $\beta = .31$ ;  $p = .00$ ), power sharing ( $\beta = .23$ ;  $p = .00$ ), ethical guidance ( $\beta = .16$ ;  $p = .00$ ), people orientation ( $\beta = .15$ ;  $p = .00$ ), role clarification ( $\beta = .13$ ;  $p = .00$ ), fairness ( $\beta = .11$ ;  $p = .01$ ), and concern for sustainability ( $\beta = -.09$ ;  $p = .02$ ) acted as significant positive predictors of work engagement, with integrity, power sharing, ethical guidance, people orientation, role clarification, fairness and concern for sustainability contributing the most towards explaining the variance in the work engagement variable.

In model 10 (job satisfaction), role clarification ( $\beta = .26$ ;  $p = .00$ ), ethical guidance ( $\beta = .19$ ;  $p = .00$ ), integrity ( $\beta = .18$ ;  $p = .00$ ), power sharing ( $\beta = .16$ ;  $p = .00$ ), and concern for sustainability ( $\beta = .07$ ;  $p = .03$ ) acted as significant positive predictors of job satisfaction, with role clarification, ethical guidance, integrity, power sharing and concern for sustainability contributing the most towards explaining the variance in the job satisfaction variable.

In model 11 (organisational commitment), people orientation ( $\beta = .24$ ;  $p = .00$ ), ethical guidance ( $\beta = .23$ ;  $p = .00$ ), role clarification ( $\beta = .19$ ;  $p = .00$ ), power sharing ( $\beta = .16$ ;  $p = .00$ ), fairness ( $\beta = .09$ ;  $p = .02$ ), and integrity ( $\beta = .08$ ;  $p = .01$ ) acted as significant positive predictors of organisational commitment, with people orientation, ethical guidance, role clarification, power sharing, fairness and integrity contributing the most towards explaining the variance in the organisational commitment variable.

In model 13 (OCB), role clarification ( $\beta = .26$ ;  $p = .00$ ), power sharing ( $\beta = .23$ ;  $p = .00$ ), people orientation ( $\beta = .18$ ;  $p = .00$ ) and integrity ( $\beta = .12$ ;  $p = .01$ ) acted as significant positive predictors of OCB, with role clarification, ethical guidance, integrity, power sharing and concern for sustainability contributing the most towards explaining the variance in the job satisfaction variable. Table 7.17 below summarises the findings of the regression analyses.

Table 7.17

*Summary of the Ethical Context and Behaviour Variables that Acted As Significant Predictors of the Job Retention and Performance*

Significant predictor (independent) variables: Ethical context and behaviour variables	Criterion dependent variables: Job retention and performance-related factors			
	Work engagement (UWES)	Job satisfaction (JSQ)	Organisational commitment (OCS)	OCB (OCBQ)
Ethical culture				
Clarity	Positive prediction	Negative prediction	Negative prediction	n/p
Congruency of supervisor	Positive prediction	Positive prediction	Positive prediction	Positive prediction
Congruency of management	n/p	Positive prediction	Positive prediction	Positive prediction
Feasibility	Positive prediction	n/p	n/p	n/p
Supportability	Positive prediction	Positive prediction	Positive prediction	n/p
Transparency	Negative prediction	n/p	Positive prediction	Positive prediction
Discusability	Positive prediction	Positive prediction	Positive prediction	Positive prediction
Sanctionability	Positive prediction	Positive prediction	Positive prediction	Positive prediction
Ethical climate				
Caring	Positive prediction	Positive prediction	Positive prediction	Positive prediction
Law and code	Positive prediction	Positive prediction	Positive prediction	Positive prediction
Ethical climate				
Rules	Positive prediction	Positive prediction	n/p	n/p
Instrumental	Negative prediction	Negative prediction	Positive prediction	Positive prediction
Independence	n/p	Positive prediction	Negative prediction	Negative prediction
Ethical leadership				
People orientation	Positive prediction	n/p	Positive prediction	Positive prediction
Fairness	Positive prediction	n/p	Positive prediction	n/p
Power sharing	Positive prediction	Positive prediction	Positive prediction	Positive prediction
Concern for sustainability	Positive prediction	Positive prediction	n/p	n/p
Ethical guidance	Positive prediction	Positive prediction	Positive prediction	n/p
Role clarification	Positive prediction	Positive prediction	Positive prediction	Positive prediction
Integrity	Positive prediction	Positive prediction	Positive prediction	Positive prediction

Note: n/p = no prediction

The results provided substantial support for the research hypothesis Ha3: The ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership significantly predict job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

### 7.3.3 Structural equation modelling

Based on the significant relationship between the independent and dependent canonical construct variates, and thus using the results of the canonical correlation analysis as the baseline measurement model, structural equation modelling was performed to test research hypothesis Ha4: The theoretically hypothesised model on the relationship between the ethical context and behaviour, conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB, have a good fit with the empirically manifested structural model.

The motivation for using this approach was to validate the ethical context, behaviour, job retention and performance models that emerged from numerous analyses of the interrelationship and overall relationship between the variables. The test statistics and goodness indices provided by AMOS (Arbuckle, 2012) were examined. Three models were tested, with the third model producing the best fit.

Table 7.18 summarises the fit statistics of the three models that were tested. Model 1 included all the ethical context and behaviour (CEVQ, ECQ and ELWQ variables) and all the job retention and performance (UWES, JSQ, OCS, and OCBQ variables). Model 1 did not provide a good fit with the data: CMIN 1491.53 (182 df); CMIN/df = 8.195;  $p = .000$ ; NFI = .91; RFI = .90; TLI = .91; CFI = .92, RMSEA = .09 and SRMR = .04.

Model 2 included clarity, congruency of supervisor, supportability, transparency, discussability, caring, law and codes, independence, power sharing, ethical guidance and role clarification (ethical context and behaviour), and dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective commitment, continuance commitment, normative commitment, sportsmanship, courtesy and altruism (job retention and performance). The model data fit did not improve: CMIN 1285.05 (180 df); CMIN/df = 7.139;  $p = .000$ ; NFI = .92; RFI = .91; TLI = .92; CFI = .93, RMSEA = .08 and SRMR = .03;  $\Delta$ SRMR = 206.48.

As can be seen in Figure 7.1 below, the third model included clarity, congruency of supervisor, supportability, transparency, discussability, caring, law and codes, independence, power sharing, ethical guidance and role clarification (ethical context and behaviour), and dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective commitment, continuance commitment, normative commitment,

sportsmanship, courtesy and altruism (job retention and performance). Some modifications were effected in order to improve the model. Firstly, power sharing and role clarification were linked with dedication. Secondly, normative commitment was linked with satisfaction with supervisor, and thirdly, courtesy was linked with satisfaction with work itself. After the modifications, the model produced a good fit with the data: CMIN 985.23 (173 df); CMIN/df = 5.695;  $p = .000$ ; NFI = .94; RFI = .93; TLI = .94; CFI = .95, RMSEA = .07 and SRMR = .03;  $\Delta$ SRMR = 299.82. The results of the best fit model are in line with the observation made in terms of the canonical correlation analyses with regard to the best predictors of each construct.

Table 7.18

*Structural Equation Modelling Results: Fit Statistics*

Model	CMIN	df	CMIN/df	p	NFI	RFI	TLI	CFI	$\Delta$ CMIN	RMSEA	SRMR
1	1491.53	182	8.195	.00	.91	.90	.91	.92		.09	.04
2	1285.05	180	7.139	.00	.92	.91	.92	.93	206.48	.08	.03
3	985.23	173	5.695	.00	.94	.93	.94	.95	299.82	.07	.03

Note: CMIN(X2) = chi-square; df = degree of freedom; p = significance level; NFI = Bentler-Bonett normed fit index; RFI = relative fit index; TLI = non-normed fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation. SRMR = standardised root-mean-square residual.

Figure 7.1 identifies the standardised path coefficient between the ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as per the best fit model.

The standardised path coefficient estimates between the ethical context and behaviour and the job retention and performance are also specified. Parallel to the results observed in the canonical correlation analysis, CEV congruency of supervisor ( $\beta = .90$ ), transparency ( $\beta = .90$ ), clarity ( $\beta = .83$ ), discussability ( $\beta = .82$ ) and supportability ( $\beta = .81$ ); ECQ caring ( $\beta = .86$ ), independence ( $\beta = .85$ ) and law and codes ( $\beta = .82$ ); and ELWQ power sharing ( $\beta = .85$ ), ethical guidance ( $\beta = .83$ ) and role clarification ( $\beta = .73$ ) were the strongest predictors of the ethical context and behaviour variables, with congruency of supervisor and transparency contributing the most towards explaining the variance in the ethical context and behaviour variables.

UWES absorption ( $\beta = .97$ ), dedication ( $\beta = .94$ ); OCB sportsmanship ( $\beta = .92$ ), courtesy ( $\beta = .90$ ) and altruism ( $\beta = .88$ ); OCS continuance commitment ( $\beta = .88$ ), normative commitment ( $\beta = .84$ ), and affective commitment ( $\beta = .82$ ); and JSQ satisfaction with supervisor ( $\beta = .82$ ) and satisfaction with work itself ( $\beta = .75$ ) were the strongest predictors of the job retention and performance-related factors, with absorption, dedication, sportsmanship and courtesy contributing the most towards explaining the variance in the job retention and performance-related factors.

Overall, the ethical context and behaviour variables positively predicted the job retention and performance-related factors ( $\beta = .99$ ). The square multiple correlations showed that the model explained 99% of the variance in the overall job retention and performance-related factors, 98% of the variance in absorption and dedication, 93% of the variance in satisfaction with supervisor and satisfaction with work itself, 92% of the variance in affective commitment, continuance commitment and normative commitment, and 80% of the variances in sportsmanship, courtesy and altruism (large practical effect).

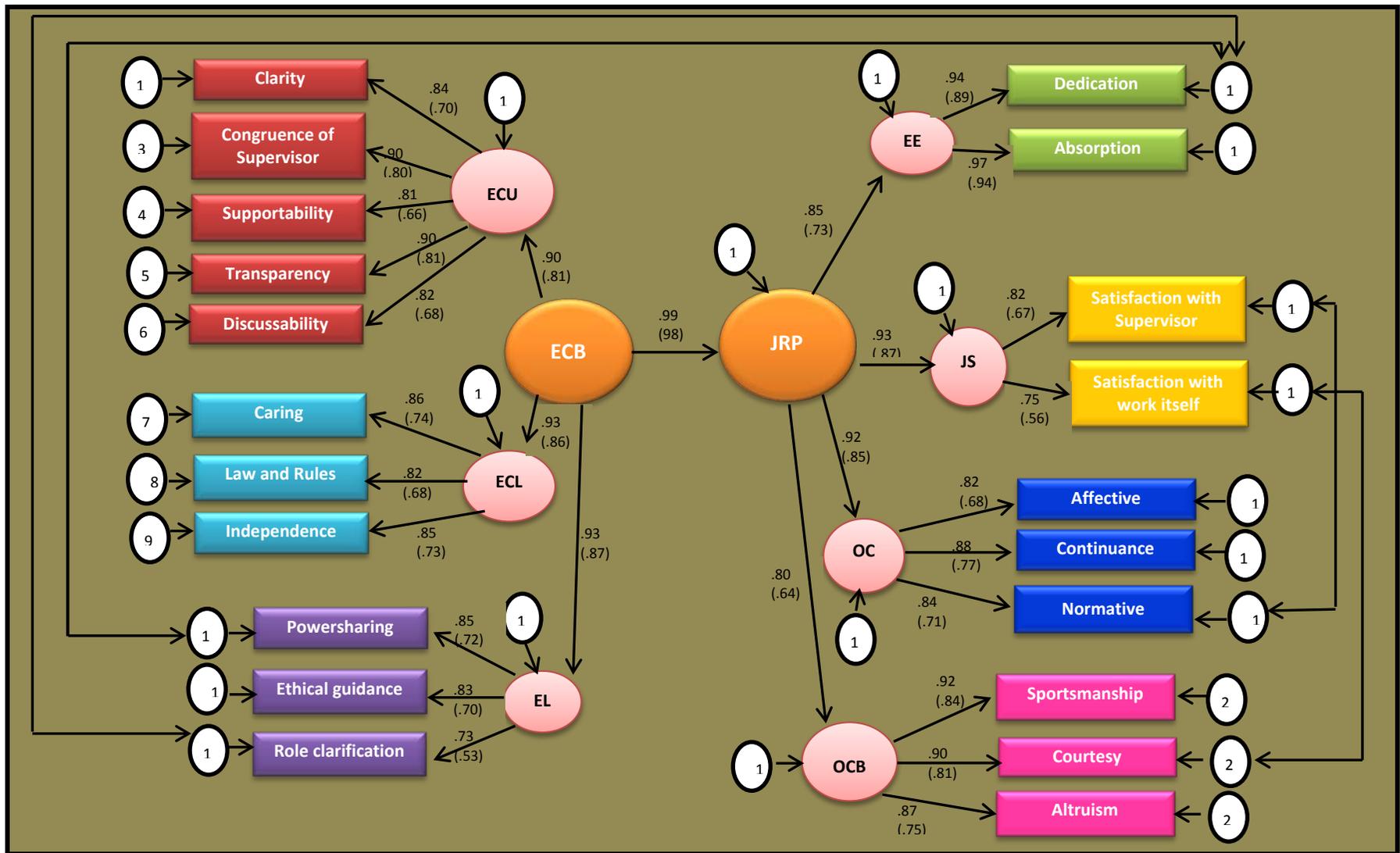


Figure 7.1 Standardised path coefficient between the ethical context and behaviour variables and job retention and performance related-factors.

Figure 7.1 Three final structural models linking the ethical context and behaviour variables to the job retention and performance-related factors of dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective commitment, continuance commitment, normative commitment, sportsmanship, courtesy and altruism

The above results provided support for the research hypothesis Ha4: The theoretically hypothesised ethical context and behaviour model has a good fit with the empirically manifested structural model.

### **7.3.4 Hierarchical moderated regression analysis**

Based on the canonical correlations and best fit structural equation model shown in Figure 7.1 and Table 7.18, hierarchical regression analyses were performed in order to determine whether or not demographic characteristics (measured as age, gender, educational level and tenure) acted as moderators in the relationship between ethical context and behaviour, conceptualised as ethical culture, ethical climate and ethical leadership, and job retention and performance, conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

#### *7.3.4.1 Gender as a moderator*

Table 7.19 and Table 7.20 (in appendix A) report the final step of the results of the moderated regression analysis, with gender as a moderator of the relationship between supportability, law and codes and satisfaction with supervisor and affective commitment.

Table 7.19 (in appendix A) indicated, in terms of the main effects, that supportability acted only as a significant predictor of satisfaction with work itself ( $\beta = .50$ ;  $p \leq .001$ ), while gender did not act as a predictor of satisfaction with supervisor.

In terms of the interaction effects, gender significantly moderated only the relationship between the supportability ethical culture variable and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 10.18$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using the simple slope test and by graphing the interaction using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen, Cohen, Aiken, & West, 2013). As portrayed in Figure 6.41 (in appendix B), the relationship between supportability and satisfaction with supervisor was stronger for those who were male (1 = males) than for those who were female (0 = females). The male participants who scored higher on supportability also achieved significantly higher scores than the female participants on their satisfaction with supervisor.

Table 7.20 (in appendix A) indicated, in terms of the main effects, that law and codes acted only as a significant predictor of satisfaction with work itself ( $\beta = .69$ ;  $p \leq .001$ ), while gender did not act as a predictor of affective commitment. In terms of the interaction effects, gender significantly moderated only the relationship between the law and codes ethical climate variable and affective commitment ( $\Delta R^2 = .00$ ;  $\Delta F = 5.64$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using the simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As shown in Figure 6.3 (in appendix B), the relationship between law and codes and affective commitment was stronger for those who were male (1 = males) than for those who were female (0 = female). The male participants who scored high on law and codes also achieved significantly higher scores than the female participants on their affective commitment.

#### 7.3.4.2 *Age as a moderator*

Table 7.21, Table 7.22 and Table 7.23 (in appendix A) report the results of the moderated regression analysis with age as a moderator of the relationship between clarity, congruency of supervisor, supportability, transparency, discussability, caring, law and codes, independence, power sharing, ethical guidance and role clarification, and dedication, absorption, affective commitment, continuance commitment, normative commitment, satisfaction with supervisor, satisfaction with work itself, sportsmanship, and courtesy and altruism respectively.

As indicated in Table 7.21 (in appendix A), in terms of the main effects, clarity acted as a significant predictor of dedication ( $\beta = .67$ ;  $p \leq .001$ ), absorption ( $\beta = .70$ ;  $p \leq .001$ ), affective commitment ( $\beta = .58$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .63$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .58$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = 1.09$ ;  $p \leq .001$ ), absorption ( $\beta = 1.33$ ;  $p \leq .001$ ), affective commitment ( $\beta = .99$ ;  $p \leq .001$ ), continuance commitment ( $\beta = 1.25$ ;  $p \leq .001$ ), and normative commitment ( $\beta = 1.15$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between clarity and dedication ( $\Delta R^2 = .02$ ;  $\Delta F = 22.44$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .02$ ;  $\Delta F = 36.86$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 14.64$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 25.49$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 18.75$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.4, 7.5, 7.6, 7.7 and 7.8 (in appendix B) the relationship between clarity and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on clarity also achieved significantly high scores on dedication, absorption, affective commitment, continuance commitment and normative commitment.

Table 7.21 indicated, in terms of the main effects, that congruency of supervisor acted as a significant predictor of dedication ( $\beta = .66$ ;  $p \leq .001$ ), absorption ( $\beta = .73$ ;  $p \leq .001$ ), affective commitment ( $\beta = .65$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .73$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .68$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = .05$ ;  $p \leq .01$ ), affective commitment ( $\beta = .14$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .13$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .16$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between congruency of supervisor and dedication ( $\Delta R^2 = .00$ ;  $\Delta F = 6.30$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 14.40$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 23.15$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 23.78$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 20.06$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As indicated in Figures 7.9, 7.10, 7.11, 7.12 and 7.13 (in appendix B) the relationship between congruency of supervisor and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on congruency of supervisor also recorded significantly higher scores than the older participants on dedication, absorption, affective commitment, continuance commitment, and normative commitment.

Table 7.21 (in appendix A) indicated, in terms of the main effects, that supportability acted as a significant predictor of dedication ( $\beta = .67$ ;  $p \leq .001$ ), absorption ( $\beta = .69$ ;  $p \leq .001$ ), affective commitment ( $\beta = .60$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .66$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .60$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = .09$ ;  $p \leq .01$ ), absorption ( $\beta = .09$ ;  $p \leq .01$ ), affective commitment ( $\beta = .13$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .15$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .17$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between supportability and dedication ( $\Delta R^2 = .03$ ;  $\Delta F = 36.86$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .03$ ;  $\Delta F = 22.34$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 18.76$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 28.42$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 19.30$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As illustrated in Figures 7.14, 7.15, 7.16, 7.17 and 7.18 (in appendix B) the relationship between supportability and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those were older ( $\geq 40$  years). The younger participants who scored high on supportability also achieved significantly higher scores than the older participants on dedication, absorption, affective commitment, continuance commitment, and normative commitment.

Table 7.21 (in appendix A) indicated, in terms of the main effects, that transparency acted as a significant predictor of dedication ( $\beta = .62$ ;  $p \leq .001$ ), absorption ( $\beta = .67$ ;  $p \leq .001$ ), affective commitment ( $\beta = .62$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .64$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .66$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = .12$ ;  $p \leq .01$ ), absorption ( $\beta = .12$ ;  $p \leq .01$ ), affective commitment ( $\beta = .14$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .18$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .18$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between transparency and dedication ( $\Delta R^2 = .02$ ;  $\Delta F = 28.33$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .03$ ;  $\Delta F = 46.51$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 15.31$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 31.35$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 23.95$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As shown in Figures 7.19 and 7.20 (in appendix B) the relationship between transparency and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on transparency also achieved significantly higher scores than the older participants on dedication and absorption.

However, Figures 7.21, 7.22 and 7.23 (in appendix B) demonstrate that the relationship between transparency and affective commitment, continuance commitment and normative commitment was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$ ). The older participants who scored high on transparency also achieved significantly higher scores than the younger participants on affective commitment, continuance commitment and normative commitment.

Table 7.21 (in appendix A) indicated, in terms of the main effects, that discussability acted as a significant predictor of dedication ( $\beta = .65$ ;  $p \leq .001$ ), absorption ( $\beta = .69$ ;  $p \leq .001$ ), affective commitment ( $\beta = .63$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .69$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .69$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = .09$ ;  $p \leq .01$ ), absorption ( $\beta = .08$ ;  $p \leq .01$ ), affective commitment ( $\beta = .13$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .14$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction

effects, age significantly moderated the relationship between discussability and dedication ( $\Delta R^2 = .02$ ;  $\Delta F = 27.40$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .02$ ;  $\Delta F = 30.00$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 20.15$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 28.09$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 8.95$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As evident from Figures 7.24, 7.25, 7.26, 7.27, 7.28 (in appendix B) the relationship between discussability and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on discussability also achieved significantly higher scores than the older participants on dedication, absorption, affective commitment, continuance commitment and normative commitment.

As indicated in Table 7.22 (in appendix A), in terms of the main effects, clarity acted as a significant predictor of satisfaction with supervisor ( $\beta = .55$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .52$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .56$ ;  $p \leq .001$ ), courtesy ( $\beta = .56$ ;  $p \leq .001$ ), and altruism ( $\beta = .59$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .66$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .78$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .87$ ;  $p \leq .001$ ), courtesy ( $\beta = 1.03$ ;  $p \leq .001$ ) and altruism ( $\beta = .78$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between clarity and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 5.60$ ;  $p \leq .01$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 8.03$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 9.11$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 14.13$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 8.64$ ;  $p \leq .01$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As is shown in Figures 7.29, 7.30, 7.31, 7.32 and 7.33 (in appendix B) the relationship between clarity and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on clarity

also achieved significantly higher scores than the older participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism.

Table 7.22 (in appendix A) indicated, in terms of the main effects, that congruency of supervisor acted as a significant predictor of satisfaction with supervisor ( $\beta = .64$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .60$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .62$ ;  $p \leq .001$ ), courtesy ( $\beta = .63$ ;  $p \leq .001$ ), and altruism ( $\beta = .60$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .09$ ;  $p \leq .01$ ), satisfaction with work itself ( $\beta = .09$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .17$ ;  $p \leq .001$ ), courtesy ( $\beta = .16$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between congruency of supervisor and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 6.84$ ;  $p \leq .01$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 7.37$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 9.61$ ;  $p \leq .01$ ), courtesy ( $\Delta R^2 = .02$ ;  $\Delta F = 23.22$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 11.17$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.34, .35, 7.36, .37 and .38 (in appendix B) the relationship between congruency of supervisor and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on congruency of supervisor also achieved significantly higher scores than the younger participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.

Table 7.22 (in appendix A) indicated, in terms of the main effects, that supportability acted as a significant predictor of satisfaction with supervisor ( $\beta = .59$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .54$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .54$ ;  $p \leq .001$ ), courtesy ( $\beta = .58$ ;  $p \leq .001$ ), and altruism ( $\beta = .51$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .11$ ;  $p \leq .01$ ), satisfaction with work itself ( $\beta = .10$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .17$ ;  $p \leq .001$ ), courtesy ( $\beta = .16$ ;  $p \leq .001$ ) and altruism ( $\beta = .13$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between supportability and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 11.12$ ;  $p \leq .01$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 11.53$ ;  $p \leq .001$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 7.40$ ;  $p \leq .01$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 13.56$ ;  $p \leq .001$ ),

and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 9.01$ ;  $p \leq .01$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As evident from Figures 7.39, 7.40, 7.41, 7.42 and 7.43, (in appendix B) the relationship between supportability and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on supportability also achieved significantly higher scores than the younger participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.

Table 7.22 (in appendix A) indicated, in terms of the main effects, that transparency acted as a significant predictor of satisfaction with supervisor ( $\beta = .61$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .52$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .62$ ;  $p \leq .001$ ), courtesy ( $\beta = .59$ ;  $p \leq .001$ ), and altruism ( $\beta = .55$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .10$ ;  $p \leq .01$ ), satisfaction with work itself ( $\beta = .13$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .20$ ;  $p \leq .001$ ), courtesy ( $\beta = .17$ ;  $p \leq .001$ ) and altruism ( $\beta = .11$ ;  $p \leq .01$ ). In terms of the interaction effects, age significantly moderated the relationship between transparency and satisfaction with supervisor ( $\Delta R^2 = .00$ ;  $\Delta F = 4.54$ ;  $p \leq .01$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 12.68$ ;  $p \leq .001$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 18.76$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 13.96$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .00$ ;  $\Delta F = 2.42$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As illustrated in Figures 7.44, 7.45, 7.46, 7.47 and 7.48 (in appendix B) the relationship between transparency and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on transparency also achieved significantly higher scores than the younger participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.

Table 7.22 (in appendix A) indicated, in terms of the main effects, that discussability acted as a significant predictor of satisfaction with supervisor ( $\beta = .63$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .51$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .63$ ;  $p \leq .001$ ), courtesy ( $\beta = .61$ ;  $p \leq .001$ ), and altruism ( $\beta = .56$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .06$ ;  $p \leq .01$ ), satisfaction with work itself ( $\beta = .09$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .17$ ;  $p \leq .001$ ), courtesy ( $\beta = .15$ ;  $p \leq .001$ ) and altruism ( $\beta = .10$ ;  $p \leq .01$ ). In terms of the interaction effects, age significantly moderated the relationship between discussability and satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 6.34$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 12.47$ ;  $p \leq .001$ ), and courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 13.71$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As Figures 7.49, 7.50, and 7.51 (in appendix B) show, the relationship between discussability and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on discussability also achieved significantly higher scores than the younger participants on satisfaction with work itself, sportsmanship, and courtesy.

As indicated in Table 7.23, (in appendix A) in terms of the main effects, caring acted as a significant predictor of dedication ( $\beta = .65$ ;  $p \leq .001$ ), absorption ( $\beta = .69$ ;  $p \leq .001$ ), affective commitment ( $\beta = .66$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .74$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .68$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = .06$ ;  $p \leq .01$ ), absorption ( $\beta = .08$ ;  $p \leq .01$ ), affective commitment ( $\beta = .10$ ;  $p \leq .01$ ), continuance commitment ( $\beta = .14$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .16$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between caring and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 13.52$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .02$ ;  $\Delta F = 23.46$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 9.74$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 29.35$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 24.80$ ;  $p \leq .001$ ). Overall, all the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.52, 7.53, 7.54, 7.55 and 7.56 (in appendix

B) the relationship between caring and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored higher on caring climate also achieved significantly higher scores than the older participants on absorption, affective commitment, continuance commitment and normative commitment.

Table 7.23 (in appendix A) indicated, in terms of the main effects, that law and codes acted as a significant predictor of dedication ( $\beta = .70$ ;  $p \leq .001$ ), absorption ( $\beta = .70$ ;  $p \leq .001$ ), affective commitment ( $\beta = .65$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .66$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .60$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = .06$ ;  $p \leq .01$ ), absorption ( $\beta = .08$ ;  $p \leq .01$ ), affective commitment ( $\beta = .10$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .15$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .17$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between law and codes and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 12.57$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 16.86$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 6.96$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 15.58$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 15.82$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As illustrated in Figures 7.57 and 7.58 (in appendix B) the relationship between law and codes and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored higher on law and codes climate also achieved significantly higher scores than the older participants on dedication and absorption.

However, as Figures 7.59, 7.60 and 7.61 (in appendix B) indicate, the relationship between law and codes and affective commitment, continuance commitment and normative commitment was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored higher on law and codes climate also achieved significantly higher scores than the younger participants on affective commitment, continuance commitment and normative commitment.

Table 7.23 (in appendix A) indicated, in terms of the main effects, that independence acted as a significant predictor of dedication ( $\beta = .66$ ;  $p \leq .001$ ), absorption ( $\beta = .68$ ;  $p \leq .001$ ), affective commitment ( $\beta = .59$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .69$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .60$ ;  $p \leq .001$ ), while age acted as a predictor of dedication ( $\beta = .07$ ;  $p \leq .01$ ), absorption ( $\beta = .06$ ;  $p \leq .01$ ), affective commitment ( $\beta = .11$ ;  $p \leq .01$ ), continuance commitment ( $\beta = .13$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .18$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between independence and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 12.23$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 11.76$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .00$ ;  $\Delta F = 5.33$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 15.58$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 18.61$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.62 and 7.63 (in appendix B) the relationship between independence and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored higher on independence climate also achieved significantly higher scores than the older participants on dedication and absorption.

However, Figures 7.64, 7.65 and 7.66 (in appendix B) make it clear that the relationship between independence and affective commitment, continuance commitment and normative commitment was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored higher on independence climate also achieved significantly higher scores than the younger participants on affective commitment, continuance commitment and normative commitment.

As indicated in Table 7.24 (in appendix A), in terms of the main effects, caring acted as a significant predictor of satisfaction with supervisor ( $\beta = .63$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .61$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .61$ ;  $p \leq .001$ ), courtesy ( $\beta = .61$ ;  $p \leq .001$ ), and altruism ( $\beta = .56$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .12$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .09$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .18$ ;  $p \leq .001$ ), courtesy ( $\beta = .16$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, age

significantly moderated the relationship between caring and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 17.71$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 11.42$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 12.23$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 17.51$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 9.36$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As evident from Figures 7.67 and 7.68 (in appendix B), the relationship between caring and satisfaction with supervisor and satisfaction with work itself was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored higher on caring climate also achieved significantly higher scores than the older participants on satisfaction with supervisor and satisfaction with work itself.

However, Figures 7.69, 7.70 and 7.71 (in appendix B) illustrate that the relationship between caring and sportsmanship, courtesy and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored higher on caring climate also achieved significantly higher scores than the younger participants on sportsmanship, courtesy, and altruism.

Table 7.24 (in appendix A) indicated, in terms of the main effects, that law and codes acted as a significant predictor of satisfaction with supervisor ( $\beta = .65$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .57$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .58$ ;  $p \leq .001$ ), courtesy ( $\beta = .61$ ;  $p \leq .001$ ), and altruism ( $\beta = .57$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .11$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .08$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .19$ ;  $p \leq .001$ ), courtesy ( $\beta = .17$ ;  $p \leq .001$ ) and altruism ( $\beta = .10$ ;  $p \leq .01$ ). In terms of the interaction effects, age significantly moderated the relationship between law and codes and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 12.10$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 14.89$ ;  $p \leq .001$ ), and courtesy ( $\Delta R^2 = .02$ ;  $\Delta F = 24.25$ ;  $p \leq .001$ ). Age did not moderate the relationship between law and codes and altruism. Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the

mean (Cohen et al., 2013). As Figures 7.72, 7.73, and 7.74 (in appendix B) illustrate, the relationship between law and codes and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on law and codes climate also achieved significantly higher scores than the younger participants on satisfaction with supervisor, sportsmanship, and courtesy.

Table 7.24 (in appendix A) indicated, in terms of the main effects, that independence acted as a significant predictor of satisfaction with supervisor ( $\beta = .59$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .56$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .53$ ;  $p \leq .001$ ), courtesy ( $\beta = .54$ ;  $p \leq .001$ ), and altruism ( $\beta = .59$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .12$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .11$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .20$ ;  $p \leq .001$ ), courtesy ( $\beta = .18$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between independence and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 11.50$ ;  $p \leq .01$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 9.70$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 11.49$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 16.02$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 7.47$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). Figures 7.75, 7.76, 7.77, 7.78 and 7.79 (in appendix B) make it clear that the relationship between law and codes and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on law and codes also achieved significantly higher scores than the younger participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.

As indicated in Table 7.25 (in appendix A), in terms of the main effects, power sharing acted as a significant predictor of dedication ( $\beta = .71$ ;  $p \leq .001$ ), absorption ( $\beta = .68$ ;  $p \leq .001$ ), affective commitment ( $\beta = .61$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .70$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .62$ ;  $p \leq .001$ ), while age acted only as a predictor of affective commitment ( $\beta = .12$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .14$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .16$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship

between power sharing and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 11.43$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 10.53$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 17.59$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 32.31$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 23.74$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As may be observed in Figures 7.80, 7.81, 7.82, 7.83 and 7.84 (in appendix B), the relationship between power sharing and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on power sharing also achieved significantly higher scores than the older participants on dedication, absorption, affective commitment, continuance commitment, and normative commitment.

Table 7.25 (in appendix A) indicated, in terms of the main effects, that ethical guidance acted as a significant predictor of dedication ( $\beta = .66$ ;  $p \leq .001$ ), absorption ( $\beta = .68$ ;  $p \leq .001$ ), affective commitment ( $\beta = .63$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .68$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .64$ ;  $p \leq .001$ ), while age acted only as a predictor of affective commitment ( $\beta = .11$ ;  $p \leq .01$ ), continuance commitment ( $\beta = .15$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .15$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between ethical guidance and dedication ( $\Delta R^2 = .00$ ;  $\Delta F = 4.38$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .00$ ;  $\Delta F = 6.08$ ;  $p \leq .01$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 15.19$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 35.39$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 17.28$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As is evident in Figures 7.85, 7.86, 7.87, 7.88 and 7.89 (in appendix B), the relationship between ethical guidance and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on ethical guidance also achieved significantly higher scores than the older participants on

dedication, absorption, affective commitment, continuance commitment, and normative commitment.

Table 7.25 (in appendix A) indicated, in terms of the main effects, that role clarification acted as a significant predictor of dedication ( $\beta = .68$ ;  $p \leq .001$ ), absorption ( $\beta = .65$ ;  $p \leq .001$ ), affective commitment ( $\beta = .56$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .60$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .51$ ;  $p \leq .001$ ), while age acted only as a predictor of affective commitment ( $\beta = .12$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .14$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .17$ ;  $p \leq .001$ ). In terms of the interaction effects, age significantly moderated the relationship between role clarification and dedication ( $\Delta R^2 = .00$ ;  $\Delta F = 6.06$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 10.60$ ;  $p \leq .01$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 10.01$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 16.07$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 15.21$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). Figures 7.90, 7.91, 7.92, 7.93 and 7.94 (in appendix B) illustrate that the relationship between role clarification and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who were younger ( $\leq 40$  years) than for those who were older ( $\geq 40$  years). The younger participants who scored high on role clarification also recorded significantly higher scores than the older participants on dedication, absorption, affective commitment, continuance commitment, and normative commitment.

As indicated in Table 7.26 (in appendix A), in terms of the main effects, power sharing acted as a significant predictor of satisfaction with supervisor ( $\beta = .57$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .57$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .63$ ;  $p \leq .001$ ), courtesy ( $\beta = .64$ ;  $p \leq .001$ ), and altruism ( $\beta = .59$ ;  $p \leq .001$ ), while age acted as a predictor of satisfaction with supervisor ( $\beta = .09$ ;  $p \leq .01$ ), satisfaction with work itself ( $\beta = .07$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .16$ ;  $p \leq .001$ ), courtesy ( $\beta = .17$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .01$ ). In terms of the interaction effects, age significantly moderated the relationship between power sharing and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 7.67$ ;  $p \leq .01$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 5.77$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 14.85$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .02$ ;  $\Delta F = 28.98$ ;  $p \leq .001$ ), and

altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 12.10$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As is clear from Figures 7.95, 7.96, 7.97, 7.98 and 7.99 (in appendix B), the relationship between power sharing and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on power sharing also achieved significantly higher scores than the younger participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.

Table 7.26 (in appendix A) indicated, in terms of the main effects, that ethical guidance acted as a significant predictor of satisfaction with supervisor ( $\beta = .63$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .57$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .55$ ;  $p \leq .001$ ), courtesy ( $\beta = .60$ ;  $p \leq .001$ ), and altruism ( $\beta = .52$ ;  $p \leq .001$ ), while age acted only as a predictor of sportsmanship ( $\beta = .18$ ;  $p \leq .001$ ), courtesy ( $\beta = .17$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .01$ ). In terms of the interaction effects, age significantly moderated the relationship between ethical guidance and sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 10.42$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .02$ ;  $\Delta F = 20.09$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 7.48$ ;  $p \leq .01$ ). Age did not significantly moderate the relationship between ethical guidance and both satisfaction with supervisor and satisfaction with work itself. Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As evident from Figures 7.100, 7.101, 7.102, and 7.103 (in appendix B), the relationship between ethical guidance and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on ethical guidance also achieved significantly higher scores than the younger participants on sportsmanship, courtesy and altruism.

Table 7.26 (in appendix A) indicated, in terms of the main effects, that role clarification acted as a significant predictor of satisfaction with supervisor ( $\beta = .57$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .52$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .58$ ;  $p \leq .001$ ), courtesy ( $\beta = .60$ ;  $p \leq .001$ ), and altruism ( $\beta = .57$ ;  $p \leq .001$ ), while age acted only as a predictor of satisfaction with work itself ( $\beta = .07$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .17$ ;  $p \leq .001$ ), courtesy ( $\beta = .16$ ;  $p \leq .001$ ) and altruism ( $\beta = .13$ ;  $p \leq .01$ ). In terms of the interaction effects, age significantly moderated the relationship between role clarification and sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 10.49$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .02$ ;  $\Delta F = 19.40$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 14.87$ ;  $p \leq .001$ ). Age did not significantly moderate the relationship between role clarification and both satisfaction with supervisor and satisfaction with work itself. Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). Figures 7.104, 7.105, and 7.106 (in appendix B) emphasise that the relationship between role clarification and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who were older ( $\geq 40$  years) than for those who were younger ( $\leq 40$  years). The older participants who scored high on role clarification also achieved significantly higher scores than the younger participants on sportsmanship, courtesy and altruism.

#### 7.3.4.3 *Educational level as a moderator*

Table 7.27, Table 7.28 and Table 7.29 (in appendix A) report the results of the moderated regression analysis, with educational level as a moderator of the relationship between clarity, congruency of supervisor, supportability, transparency, discussability, caring, law and codes, independence, power sharing, ethical guidance and role clarification, and dedication, absorption, affective commitment, continuance commitment, normative commitment, satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism, respectively.

As indicated in Table 7.27 (in appendix A), in terms of the main effects, clarity acted as a significant predictor of dedication ( $\beta = .68$ ;  $p \leq .001$ ), absorption ( $\beta = .71$ ;  $p \leq .001$ ), affective commitment ( $\beta = .58$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .64$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .60$ ;  $p \leq .001$ ), while educational level acted as a predictor of dedication ( $\beta =$

.86;  $p \leq .001$ ), absorption ( $\beta = .99$ ;  $p \leq .001$ ), affective commitment ( $\beta = .82$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .98$ ;  $p \leq .001$ ), and normative commitment ( $\beta = 1.16$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between clarity and dedication ( $\Delta R^2 = .02$ ;  $\Delta F = 26.62$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .02$ ;  $\Delta F = 31.17$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 10.86$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 19.48$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 21.57$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted by Figures 7.107, 7.108, 7.109, 7.110 and 7.111 (in appendix B), the relationship between clarity and dedication, absorption, affective commitment, continuance commitment and normative commitment was stronger for those who had a low educational level ( $\leq 4$  undergraduate) than for those with a high educational level ( $\geq 5$  postgraduate). The undergraduate participants who scored high on clarity also achieved significantly higher scores than the postgraduate participants on dedication, absorption, affective commitment, continuance commitment, and normative commitment.

Table 7.27 (in appendix A) indicated, in terms of the main effects, that congruency of supervisor acted as a significant predictor of dedication ( $\beta = .68$ ;  $p \leq .001$ ), absorption ( $\beta = .74$ ;  $p \leq .001$ ), affective commitment ( $\beta = .63$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .73$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .68$ ;  $p \leq .001$ ), while educational level acted as a predictor of affective commitment ( $\beta = .14$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .11$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .10$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between congruency of supervisor and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 10.48$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 16.35$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .00$ ;  $\Delta F = 3.93$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 13.54$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .00$ ;  $\Delta F = 4.60$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As shown in Figures 7.112 and 7.113 (Appendix B), the perceptions of dedication and absorption significantly increased for both those with a low educational level

( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when the congruency of the supervisor was high. However, this effect was stronger for those who had a low educational level ( $\leq 4$  undergraduate). Figures 7.114, 7.115 and 7.116 (Appendix B) indicate that perceptions of affective commitment, continuance commitment and normative commitment significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when the congruence of the supervisor was high. However, this effect was slightly stronger for participants with a high educational level ( $\geq 5$  postgraduate). The postgraduate participants who scored high on congruency of supervisor also achieved significantly higher scores than the undergraduate participants on dedication and absorption.

Table 7.27 (in appendix A) indicated, in terms of the main effects, that supportability acted as a significant predictor of dedication ( $\beta = .66$ ;  $p \leq .001$ ), absorption ( $\beta = .68$ ;  $p \leq .001$ ), affective commitment ( $\beta = .59$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .67$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .61$ ;  $p \leq .001$ ), while educational level acted as a predictor of affective commitment ( $\beta = .16$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .13$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .13$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between supportability and dedication ( $\Delta R^2 = .02$ ;  $\Delta F = 20.26$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .02$ ;  $\Delta F = 24.59$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 14.15$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 25.73$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 24.30$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As is clear from Figures 7.117 and 7.118 (Appendix B), the perceptions of dedication and absorption significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when supportability was high. However, this effect was slightly stronger for those participants with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on supportability also achieved significantly higher scores than the postgraduate participants on dedication and absorption.

Figures 7.119, 7.120 and 7.121 (Appendix B) indicate that the perceptions of affective commitment, continuance commitment and normative commitment significantly increased for those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when supportability was high. Nevertheless, this effect was stronger for those participants with a high educational level ( $\geq 5$  postgraduate). The postgraduate participants who scored high on supportability also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and continuance commitment.

Table 7.27 (in appendix A) indicated, in terms of the main effects, that transparency acted as a significant predictor of dedication ( $\beta = .63$ ;  $p \leq .001$ ), absorption ( $\beta = .68$ ;  $p \leq .001$ ), affective commitment ( $\beta = .62$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .64$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .67$ ;  $p \leq .001$ ), while educational level acted as a predictor of affective commitment ( $\beta = .15$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .12$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between transparency and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 17.47$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .02$ ;  $\Delta F = 24.04$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 9.66$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 13.79$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 16.16$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size. The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.122 and 7.123 (Appendix B), the perceptions of dedication and absorption significantly increased for participants with a low level of education ( $\leq 4$  undergraduate) and those with a high level of education ( $\geq 5$  postgraduate) when transparency was high. However, this effect was slightly stronger for participants with a low level of education ( $\leq 4$  undergraduate). As is clear from Figures 7.124, 7.125 and 7.126 (Appendix B), perceptions of affective commitment, continuance commitment and normative commitment significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when transparency was high. However, this effect was slightly stronger for participants with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on transparency also achieved significantly higher scores than the postgraduate participants on dedication and absorption, affective commitment, continuance commitment and normative commitment.

Table 7.27 (in appendix A) indicated, in terms of the main effects, that discussability acted as a significant predictor of dedication ( $\beta = .65$ ;  $p \leq .001$ ), absorption ( $\beta = .69$ ;  $p \leq .001$ ), affective commitment ( $\beta = .61$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .69$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .70$ ;  $p \leq .001$ ), while educational level acted as a predictor of affective commitment ( $\beta = .13$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .11$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .10$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between discussability and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 14.26$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 16.94$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .00$ ;  $\Delta F = 4.37$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 15.41$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 13.61$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). Figures 7.127 and 7.128 (Appendix B) clearly show that the perceptions of dedication and absorption significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when discussability was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). Furthermore, Figures 7.129, 7.130 and 7.131 (Appendix B) indicate that the perceptions of affective commitment, continuance commitment and normative commitment significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when discussability was high. However, this effect was slightly stronger for participants with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on discussability also achieved significantly higher scores than the postgraduate participants on dedication and absorption, affective commitment, continuance commitment and normative commitment.

As indicated in Table 7.28 (in appendix A), in terms of the main effects, clarity acted as a significant predictor of satisfaction with supervisor ( $\beta = .55$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .53$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .58$ ;  $p \leq .001$ ), courtesy ( $\beta = .56$ ;  $p \leq .001$ ), and altruism ( $\beta = .60$ ;  $p \leq .001$ ), while educational level acted as a predictor of satisfaction with supervisor ( $\beta = .73$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .69$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .96$ ;  $p \leq .001$ ), courtesy ( $\beta = .78$ ;  $p \leq .001$ ) and altruism ( $\beta = .89$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between clarity and

satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 10.53$ ;  $p \leq .01$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 9.26$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 9.11$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 14.13$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 15.15$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As may be observed in Figures 7.132 and 7.133 (Appendix B), perceptions of satisfaction with supervisor and satisfaction with work itself significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when clarity was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). Figures 7.134, 7.135 and 7.136 (Appendix B) show that perceptions of sportsmanship, courtesy and altruism significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when clarity was high. However, this effect was slightly stronger for those with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on clarity also achieved significantly higher scores than the postgraduate participants on dedication and absorption, affective commitment, continuance commitment and normative commitment.

Table 7.28 (in appendix A) indicated, in terms of the main effects, that congruency of supervisor acted as a significant predictor of satisfaction with supervisor ( $\beta = .65$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .61$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .62$ ;  $p \leq .001$ ), courtesy ( $\beta = .62$ ;  $p \leq .001$ ), and altruism ( $\beta = .59$ ;  $p \leq .001$ ), while educational level acted only as a predictor of sportsmanship ( $\beta = .16$ ;  $p \leq .001$ ), courtesy ( $\beta = .12$ ;  $p \leq .001$ ) and altruism ( $\beta = .10$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between congruency of supervisor and satisfaction with supervisor ( $\Delta R^2 = .00$ ;  $\Delta F = 4.50$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 7.51$ ;  $p \leq .01$ ), and sportsmanship ( $\Delta R^2 = .00$ ;  $\Delta F = 6.07$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.137 and 7.138 (Appendix B),

perceptions of satisfaction with supervisor and satisfaction with work itself significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when congruency of supervisor was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). Figures 7.139, 7.140 and 7.141 (Appendix B) illustrate that perceptions of sportsmanship, courtesy and altruism significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when congruency of supervisor was high. However, this effect was stronger for those participants with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on congruency of supervisor also achieved significantly higher scores than the postgraduate participants on satisfaction with supervisor and satisfaction with work itself, sportsmanship, courtesy and altruism.

Table 7.28 (in appendix A) indicated, in terms of the main effects, that supportability acted as a significant predictor of satisfaction with supervisor ( $\beta = .59$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .56$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .55$ ;  $p \leq .001$ ), courtesy ( $\beta = .58$ ;  $p \leq .001$ ), and altruism ( $\beta = .52$ ;  $p \leq .001$ ), while educational level acted as a predictor of satisfaction with supervisor ( $\beta = .06$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .18$ ;  $p \leq .001$ ), courtesy ( $\beta = .16$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between supportability and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 11.11$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 15.57$ ;  $p \leq .001$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 11.15$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 12.03$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 10.66$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). From Figures 7.142 and 7.143 (Appendix B), it is clear that the perceptions of satisfaction with supervisor and satisfaction with work itself significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when supportability was high. However, this effect was stronger for those participants with a low level of education ( $\leq 4$  undergraduate). Figures 7.144, 7.145 and 7.146 (Appendix B) indicate that perceptions of sportsmanship, courtesy and altruism significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when supportability was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate).

The undergraduate participants who scored high on supportability also achieved significantly higher scores than the postgraduate participants on satisfaction with supervisor and satisfaction with work itself, sportsmanship, courtesy and altruism.

Table 7.28 (in appendix A) indicated, in terms of the main effects, that transparency acted as a significant predictor of satisfaction with supervisor ( $\beta = .64$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .53$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .63$ ;  $p \leq .001$ ), courtesy ( $\beta = .60$ ;  $p \leq .001$ ), and altruism ( $\beta = .57$ ;  $p \leq .001$ ), while educational level acted as a predictor of satisfaction with supervisor ( $\beta = .06$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .17$ ;  $p \leq .001$ ), courtesy ( $\beta = .15$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .01$ ). In terms of the interaction effects, educational level significantly moderated the relationship between transparency and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 13.83$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 10.14$ ;  $p \leq .001$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 16.52$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 8.62$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 10.24$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As may be seen in Figures 7.147 and 7.148 (Appendix B), perceptions of satisfaction with supervisor and satisfaction with work itself significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when transparency was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). Figures 7.149, 7.150 and 7.151 (Appendix B) illustrate that perceptions of sportsmanship, courtesy and altruism significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when transparency was high. However, this effect was stronger for those participants with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on transparency also achieved significantly higher scores than the postgraduate participants on satisfaction with supervisor and satisfaction with work itself, sportsmanship, courtesy and altruism.

Table 7.28 (in appendix A) indicated, in terms of the main effects, that discussability acted as a significant predictor of satisfaction with supervisor ( $\beta = .65$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .53$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .64$ ;  $p \leq .001$ ), courtesy ( $\beta = .61$ ;  $p \leq .001$ ), and altruism ( $\beta = .57$ ;  $p \leq .001$ ), while educational level acted only as a predictor of sportsmanship ( $\beta = .16$ ;  $p$

$\leq .001$ ), courtesy ( $\beta = .13$ ;  $p \leq .001$ ) and altruism ( $\beta = .10$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between discussability and satisfaction with supervisor ( $\Delta R^2 = .01$ ;  $\Delta F = 8.36$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 7.95$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 14.56$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 7.21$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 8.21$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.152 and 7.153 (Appendix B), perceptions of satisfaction with supervisor and satisfaction with work itself significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when discussability was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). Figures 7.149, 7.150 and 7.151 (Appendix B) indicate that perceptions of sportsmanship, courtesy and altruism significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when discussability was high. Nevertheless, this effect was stronger for those participants with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on discussability also achieved significantly higher scores than the postgraduate participants on satisfaction with supervisor and satisfaction with work itself, sportsmanship, courtesy and altruism.

As indicated in Table 7.29 (in appendix A), in terms of the main effects, caring acted as a significant predictor of dedication ( $\beta = .66$ ;  $p \leq .001$ ), absorption ( $\beta = .69$ ;  $p \leq .001$ ), affective commitment ( $\beta = .66$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .75$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .69$ ;  $p \leq .001$ ), while educational level acted only as a predictor of affective commitment ( $\beta = .15$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .12$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between caring and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 12.96$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 16.94$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 10.46$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 38.14$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 26.36$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As shown in Figures 7.157 and 7.158 (Appendix B), perceptions of dedication and absorption significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when caring climate was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on caring climate also achieved significantly higher scores than the postgraduate participants on dedication and absorption.

Figure 7.159 (Appendix B) indicates that perceptions of affective commitment significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when caring climate was high. However, this effect was stronger for those with a high educational level ( $\geq 5$  undergraduate). Figures 7.160 and 7.161 (Appendix B) show that perceptions of continuance commitment and normative commitment significantly increased for those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when caring climate was high. However, this effect was slightly stronger for those with a high educational level ( $\geq 5$  postgraduate). The postgraduate participants who scored high on caring climate also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and normative commitment.

Table 7.29 (in appendix A) indicated, in terms of the main effects, that law and codes acted as a significant predictor of dedication ( $\beta = .72$ ;  $p \leq .001$ ), absorption ( $\beta = .73$ ;  $p \leq .001$ ), affective commitment ( $\beta = .67$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .67$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .61$ ;  $p \leq .001$ ), while educational level acted only as a predictor of affective commitment ( $\beta = .14$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .13$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between law and codes and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 21.16$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .02$ ;  $\Delta F = 30.03$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 17.00$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 25.65$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 13.41$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As may be noted in Figures 7.162 and 7.163 (Appendix A), perceptions of dedication and absorption significantly increased for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when law and codes climate was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on law and codes climate also achieved significantly higher scores than the postgraduate participants on dedication and absorption.

Figures 7.164, 7.165 and 7.166 (Appendix A) indicate that perceptions of affective commitment, continuance commitment and normative commitment increased significantly for both participants with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when the law and codes climate was high. However, this effect was slightly stronger for those with a high educational level ( $\geq 5$  postgraduate). The postgraduate participants who scored high on law and codes climate also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and normative commitment.

Table 7.29 (in appendix A) indicated, in terms of the main effects, that independence acted as a significant predictor of dedication ( $\beta = .68$ ;  $p \leq .001$ ), absorption ( $\beta = .69$ ;  $p \leq .001$ ), affective commitment ( $\beta = .60$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .71$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .62$ ;  $p \leq .001$ ), while educational level acted only as a predictor of affective commitment ( $\beta = .16$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .14$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .14$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between independence and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 21.08$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 16.05$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 9.04$ ;  $p \leq .01$ ), continuance commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 28.92$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 23.93$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). Figures 7.167 and 7.168 (Appendix B) show that perceptions of

dedication and absorption significantly increased for both participants with a low level of education ( $\leq 4$  undergraduate) and for those with a high level of education ( $\geq 5$  postgraduate) when the independence climate was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on independence climate also achieved significantly higher scores than the postgraduate participants on dedication and absorption.

Figures 7.169, 7.170 and 7.171 (Appendix B) show that perceptions of affective commitment, continuance commitment and normative commitment significantly increased for those with a high level of education ( $\geq 5$  postgraduate) and those with a low level of education ( $\leq 4$  undergraduate) when independence climate was high. However, this effect was stronger for those with a high educational level ( $\geq 5$  postgraduate). The postgraduate participants who scored high on independence climate also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and normative commitment.

As indicated in Table 7.30 (in appendix A), in terms of the main effects, caring acted as a significant predictor of satisfaction with supervisor ( $\beta = .65$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .61$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .63$ ;  $p \leq .001$ ), courtesy ( $\beta = .62$ ;  $p \leq .001$ ), and altruism ( $\beta = .58$ ;  $p \leq .001$ ), while educational level acted only as a predictor of satisfaction with supervisor ( $\beta = .06$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .18$ ;  $p \leq .001$ ), courtesy ( $\beta = .15$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between caring and satisfaction with supervisor ( $\Delta R^2 = .02$ ;  $\Delta F = 24.49$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 8.65$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .02$ ;  $\Delta F = 26.92$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 18.57$ ;  $p \leq .001$ ), and altruism ( $\Delta R^2 = .02$ ;  $\Delta F = 21.01$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.172 and 7.173 (Appendix B), perceptions of satisfaction with supervisor and satisfaction with work itself significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when caring climate was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on

caring climate also achieved significantly higher scores than the undergraduate participants on satisfaction with supervisor and satisfaction with work itself.

Figures 7.175, 7.176, and 7.174 (Appendix B) show that perceptions of sportsmanship, courtesy and altruism significantly increased for both those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when caring climate was high. However, this effect was slightly stronger for those with a high level of education ( $\geq 5$  postgraduate). The postgraduate participants who scored high on caring climate also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and normative commitment.

Table 7.30 (in appendix A) indicated, in terms of the main effects, that law and codes acted as a significant predictor of satisfaction with supervisor ( $\beta = .69$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .60$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .58$ ;  $p \leq .001$ ), courtesy ( $\beta = .60$ ;  $p \leq .001$ ), and altruism ( $\beta = .61$ ;  $p \leq .001$ ), while educational level acted only as a predictor of sportsmanship ( $\beta = .17$ ;  $p \leq .001$ ), courtesy ( $\beta = .15$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between law and codes and satisfaction with supervisor ( $\Delta R^2 = .02$ ;  $\Delta F = 29.41$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .01$ ;  $\Delta F = 15.35$ ;  $p \leq .001$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 9.58$ ;  $p \leq .01$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 8.07$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .02$ ;  $\Delta F = 18.81$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As may be noted in Figures 7.177 and 7.178 (Appendix B), perceptions of satisfaction with supervisor significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when law and codes was high. However, this effect was stronger for those with a low level of education ( $\leq 4$  undergraduate). Figure 7.179 (Appendix B) shows that perceptions of satisfaction with work itself significantly increased for both those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when the law and code climate was high. Nevertheless, this effect was stronger for those with a high educational level ( $\geq 5$  postgraduate).

Figures 7.180, and 7.181 and 7.182 (Appendix B) indicate that perceptions of sportsmanship, courtesy and altruism significantly increased for those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when the law and codes climate was high. However, this effect was slightly stronger for those with a high educational level ( $\geq 5$  postgraduate). The postgraduate participants who scored high on law and codes climate also achieved significantly higher scores than the undergraduate participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism.

Table 7.30 (in appendix A) indicated, in terms of the main effects, that independence acted as a significant predictor of satisfaction with supervisor ( $\beta = .61$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .56$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .56$ ;  $p \leq .001$ ), courtesy ( $\beta = .55$ ;  $p \leq .001$ ), and altruism ( $\beta = .62$ ;  $p \leq .001$ ), while educational level acted only as a predictor of satisfaction with supervisor ( $\beta = .08$ ;  $p \leq .01$ ), sportsmanship ( $\beta = .19$ ;  $p \leq .001$ ), courtesy ( $\beta = .17$ ;  $p \leq .001$ ) and altruism ( $\beta = .13$ ;  $p \leq .01$ ). In terms of the interaction effects, educational level significantly moderated the relationship between independence and satisfaction with supervisor ( $\Delta R^2 = .02$ ;  $\Delta F = 25.11$ ;  $p \leq .001$ ), satisfaction with work itself ( $\Delta R^2 = .00$ ;  $\Delta F = 4.65$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .02$ ;  $\Delta F = 21.25$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 12.06$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .02$ ;  $\Delta F = 22.22$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figure 7.183 (Appendix B), perceptions of satisfaction with supervisor significantly increased for both those with a low level of education ( $\leq 4$  undergraduate) and those with a high level of education ( $\geq 5$  postgraduate) when the independence climate was high. However, this effect was stronger for those who had low educational level ( $\leq 4$  undergraduate). Figure 7.184 (Appendix B) shows that perceptions of satisfaction with work itself increased significantly for both those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when independence climate was high. However, this effect was stronger for those with a high educational level ( $\geq 5$  postgraduate).

Figures 7.185, 7.186 and 7.187 (Appendix B) indicate that perceptions of sportsmanship and altruism significantly increased for both those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when independence climate was

high. However, this effect was stronger for those with a high educational level ( $\geq 5$  postgraduate). Figure 7.186 (in appendix B) indicates that the perception of courtesy significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when independence climate was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). The undergraduate participants who scored high on independence climate also achieved significantly higher scores than the postgraduate participants on satisfaction with supervisor and courtesy. Furthermore, the postgraduate participants who scored high on independence climate also achieved significantly higher scores than the undergraduate participants on satisfaction with work itself, sportsmanship and altruism.

As indicated in Table 7.31 (in appendix A), in terms of the main effects, power sharing acted as a significant predictor of dedication variable ( $\beta = .70$ ;  $p \leq .001$ ), absorption ( $\beta = .68$ ;  $p \leq .001$ ), affective commitment ( $\beta = .61$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .69$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .62$ ;  $p \leq .001$ ), while educational level acted only as a predictor of affective commitment ( $\beta = .16$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .13$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .14$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between power sharing ethical leadership variable and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 7.52$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 8.77$ ;  $p \leq .01$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 14.60$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 21.09$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .02$ ;  $\Delta F = 24.12$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As illustrated in Figures 7.188 and 7.189 (Appendix B), perceptions of dedication and absorption significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when power sharing was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  postgraduate). Figures 7.190, 7.191 and 7.192 (Appendix B) clearly show that perceptions of affective commitment, continuance commitment and normative commitment significantly increased for both those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when power sharing was high. However, this effect was slightly stronger for those with a high educational level ( $\geq 5$  postgraduate). The undergraduate

participants who scored high on power sharing also achieved significantly higher scores than the postgraduate participants on dedication and absorption. Furthermore, the postgraduate participants who scored high on power sharing also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and normative commitment.

Table 7.31 (in appendix A) indicated, in terms of the main effects, that ethical guidance acted as a significant predictor of dedication ( $\beta = .66$ ;  $p \leq .001$ ), absorption ( $\beta = .68$ ;  $p \leq .001$ ), affective commitment ( $\beta = .63$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .68$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .63$ ;  $p \leq .001$ ), while educational level acted only as a predictor of affective commitment ( $\beta = .17$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .14$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .13$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between ethical guidance and dedication ( $\Delta R^2 = .00$ ;  $\Delta F = 4.50$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 10.36$ ;  $p \leq .01$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 11.07$ ;  $p \leq .001$ ), continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 20.23$ ;  $p \leq .001$ ), and normative commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 18.30$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As shown in Figures 7.193, and 7.194 (in appendix B), the perceptions of dedication and absorption significantly increase for both those who had a low educational level ( $\leq 4$  undergraduate) and those who had a high educational level ( $\geq 5$  postgraduate) when ethical guidance is high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). Figures 7.195, 7.196, and 7.197 (Appendix B) indicate that perceptions of affective commitment, continuance commitment and normative commitment significantly increased for both those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when ethical guidance was high. Nevertheless, this effect was slightly stronger for those with a high educational level ( $\geq 5$  postgraduate). The undergraduate participants who scored high on ethical guidance also achieved significantly higher scores than the postgraduate participants on dedication and absorption. Furthermore, the postgraduate participants who scored high on power sharing also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and normative commitment.

Table 7.31 (in appendix A) indicated, in terms of the main effects, that role clarification acted as a significant predictor of dedication ( $\beta = .70$ ;  $p \leq .001$ ), absorption ( $\beta = .66$ ;  $p \leq .001$ ), affective commitment ( $\beta = .56$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .61$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .51$ ;  $p \leq .001$ ), while educational level acted only as a predictor of affective commitment ( $\beta = .16$ ;  $p \leq .001$ ), continuance commitment ( $\beta = .13$ ;  $p \leq .001$ ), and normative commitment ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated the relationship between role clarification and dedication ( $\Delta R^2 = .01$ ;  $\Delta F = 13.60$ ;  $p \leq .001$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 14.59$ ;  $p \leq .001$ ), affective commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 10.16$ ;  $p \leq .01$ ), and continuance commitment ( $\Delta R^2 = .01$ ;  $\Delta F = 12.94$ ;  $p \leq .001$ ). Educational level did not moderate the relationship between role clarification and normative commitment. Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As shown in Figures 7.198 and 7.199 (Appendix B), the perceptions of dedication and absorption significantly increased for both those with a low educational level ( $\leq 4$  undergraduate) and those with a high educational level ( $\geq 5$  postgraduate) when role clarification was high. However, this effect was stronger for those with a low educational level ( $\leq 4$  undergraduate). Figures 7.200, 7.201, and 7.202 (Appendix B) indicate that perceptions of affective commitment, continuance commitment and normative commitment significantly increased for both those with a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when role clarification was high. However, this effect was slightly stronger for those with a high educational level ( $\geq 5$  postgraduate). The undergraduate participants who scored high on role clarification also achieved significantly higher scores than the postgraduate participants on dedication and absorption. Furthermore, the postgraduate participants who scored high on power sharing also achieved significantly higher scores than the undergraduate participants on affective commitment, continuance commitment and normative commitment.

As indicated in Table 7.32 (in appendix A), in terms of the main effects, power sharing acted as a significant predictor of satisfaction with supervisor ( $\beta = .57$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .56$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .64$ ;  $p \leq .001$ ), courtesy ( $\beta = .63$ ;  $p \leq .001$ ), and altruism ( $\beta = .60$ ;  $p \leq .001$ ), while educational level acted only as a predictor of sportsmanship ( $\beta$

= .16;  $p \leq .001$ ), courtesy ( $\beta = .15$ ;  $p \leq .001$ ) and altruism ( $\beta = .12$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated only the relationship between power sharing and satisfaction with supervisor ( $\Delta R^2 = .00$ ;  $\Delta F = 4.12$ ;  $p \leq .01$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 18.03$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 12.19$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 13.83$ ;  $p \leq .001$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As depicted in Figures 7.203, 7.204, and 7.205 (in appendix B), the perceptions of satisfaction with supervisor, satisfaction with work itself significantly increase for both those who had a low educational level ( $\leq 4$  undergraduate) and those with a high one ( $\geq 5$  postgraduate) when power sharing is high. However, this effect was stronger for those who had a low educational level ( $\leq 4$  undergraduate).

However, Figures 7.206 and 7.207 (in appendix B) demonstrate that the perceptions of sportsmanship, courtesy and altruism significantly increase for both, those who had a high educational level ( $\geq 5$  postgraduate) and those with a low educational level ( $\leq 4$  undergraduate) when power sharing is high. Yet, this effect was stronger for those who had a high educational level ( $\geq 5$  postgraduate). The postgraduate participants who scored high on power sharing also achieved significantly higher scores than the undergraduate participants on sportsmanship, courtesy and altruism.

Table 7.32 (in appendix A) indicated, in terms of the main effects, that ethical guidance acted as a significant predictor of satisfaction with supervisor ( $\beta = .64$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .57$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .57$ ;  $p \leq .001$ ), courtesy ( $\beta = .60$ ;  $p \leq .001$ ), and altruism ( $\beta = .54$ ;  $p \leq .001$ ), while educational level acted only as a predictor of sportsmanship ( $\beta = .19$ ;  $p \leq .001$ ), courtesy ( $\beta = .17$ ;  $p \leq .001$ ) and altruism ( $\beta = .13$ ;  $p \leq .01$ ). In terms of the interaction effects, educational level significantly moderated only the relationship between ethical guidance and satisfaction with supervisor ( $\Delta R^2 = .00$ ;  $\Delta F = 5.39$ ;  $p \leq .001$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 13.83$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 9.64$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 8.52$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the

mean (Cohen et al., 2013). As shown in Figures 7.208, 7.209, 7.210, 7.211 and 7.212 (in appendix B), the relationship between ethical guidance and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who had a high educational level ( $\geq 5$  postgraduate) than for those who had a low level ( $\leq 4$  undergraduate). The postgraduate participants who scored high on ethical guidance also achieved significantly higher scores than the undergraduate participants on satisfaction with supervisor, sportsmanship, courtesy and altruism.

Table 7.32 (in appendix A) indicated, in terms of the main effects, that role clarification acted as a significant predictor of satisfaction with supervisor ( $\beta = .57$ ;  $p \leq .001$ ), satisfaction with work itself ( $\beta = .52$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .60$ ;  $p \leq .001$ ), courtesy ( $\beta = .60$ ;  $p \leq .001$ ), and altruism ( $\beta = .58$ ;  $p \leq .001$ ), while educational level acted only as a predictor of sportsmanship ( $\beta = .17$ ;  $p \leq .001$ ), courtesy ( $\beta = .15$ ;  $p \leq .001$ ) and altruism ( $\beta = .11$ ;  $p \leq .001$ ). In terms of the interaction effects, educational level significantly moderated only the relationship between role clarification and sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 11.91$ ;  $p \leq .001$ ), courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 6.54$ ;  $p \leq .01$ ), and altruism ( $\Delta R^2 = .01$ ;  $\Delta F = 9.93$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As may be seen in Figures 7.213, 7.214, 7.215, 7.216 and 7.217 (in appendix B), the relationship between role clarification and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy, and altruism was stronger for those who had a high educational level ( $\geq 5$  postgraduate) than for those who had a low educational level ( $\leq 4$  undergraduate). The postgraduate participants who scored high on role clarification also achieved significantly higher scores than the undergraduate participants on satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.

#### 7.3.4.4 *Tenure as a moderator*

Table 7.33 below reports the results of the moderated regression analysis with tenure as a moderator of the relationship between clarity, congruency of supervisor, discussability, and dedication, absorption, sportsmanship, courtesy and altruism, respectively.

As indicated in Table 7.33 (in appendix A), in terms of the main effects, clarity acted as a significant predictor of dedication ( $\beta = .69$ ;  $p \leq .001$ ), absorption ( $\beta = .72$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .64$ ;  $p \leq .001$ ), and courtesy ( $\beta = .65$ ;  $p \leq .001$ ). In terms of the interaction effects, tenure significantly moderated the relationship between clarity and dedication ( $\Delta R^2 = .00$ ;  $\Delta F = 4.50$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .00$ ;  $\Delta F = 4.88$ ;  $p \leq .001$ ), sportsmanship ( $\Delta R^2 = .01$ ;  $\Delta F = 7.05$ ;  $p \leq .01$ ), and courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 10.36$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As evident from Figures 7.218, 7.219, 7.220, and 7.221 (in appendix B), the relationship between clarity and dedication, absorption, sportsmanship, and courtesy was stronger for those who had less experience ( $\leq 5$  years) than for those with more experience ( $\geq 5$  years). The less experienced participants who scored high on clarity also achieved significantly higher scores than the more experienced participants on dedication, absorption, sportsmanship and courtesy.

As indicated in Table 7.33 (in appendix A), in terms of the main effects, congruency of supervisor acted as a significant predictor of dedication ( $\beta = .71$ ;  $p \leq .001$ ), absorption ( $\beta = .76$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .65$ ;  $p \leq .001$ ), and courtesy ( $\beta = .68$ ;  $p \leq .001$ ). In terms of the interaction effects, tenure significantly moderated the relationship between congruency of supervisor and dedication ( $\Delta R^2 = .00$ ;  $\Delta F = 5.78$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .00$ ;  $\Delta F = 4.78$ ;  $p \leq .01$ ), and courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 5.01$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As Figures 7.222, 7.223, and 7.224 (in appendix B) show, the relationship between congruency of supervisor and dedication, absorption, sportsmanship, and courtesy was stronger for those who had less experience ( $\leq 5$  years) than for those with more experience ( $\geq 5$  years). The less experienced participants who scored high on congruency of supervisor also achieved significantly higher scores than the more experienced participants on dedication, absorption and courtesy.

As indicated in Table 7.33 (in appendix A), in terms of the main effects, discussability acted as a significant predictor of dedication ( $\beta = .67$ ;  $p \leq .001$ ), absorption ( $\beta = .72$ ;  $p \leq .001$ ), sportsmanship ( $\beta = .65$ ;  $p \leq .001$ ), and courtesy ( $\beta = .66$ ;  $p \leq .001$ ). In terms of the interaction effects, tenure significantly moderated the relationship between discussability and dedication ( $\Delta R^2 = .00$ ;  $\Delta F = 4.94$ ;  $p \leq .01$ ), absorption ( $\Delta R^2 = .01$ ;  $\Delta F = 6.77$ ;  $p \leq .01$ ), and courtesy ( $\Delta R^2 = .01$ ;  $\Delta F = 4.05$ ;  $p \leq .01$ ). Overall, the interaction effects were small in practical effect size.

The interactions were explored using a simple slope test and by graphing the interactions using the value of the moderator at the mean, as well as standard deviations above and below the mean (Cohen et al., 2013). As portrayed in Figures 7.225, 7.226, and 7.227 (in appendix B), the relationship between discussability and dedication, absorption, sportsmanship, and courtesy was stronger for those who had less experience ( $\leq 5$  years) than for those with more experience ( $\geq 5$  years). The less experienced participants who scored high on discussability also achieved significantly higher scores than the more experienced participants on dedication, absorption and courtesy.

#### Note

The results of the hierarchical regressions above provided supportive evidence for research hypothesis Ha5 in terms of age, gender, educational level and job tenure: The biographical characteristics (measured as age, gender, educational level and tenure) significantly moderate the relationship between the ethical context and behaviour (conceptualised as ethical culture, ethical climate and ethical leadership) and the job retention and performance (conceptualised as work engagement, job satisfaction, organisational commitment and OCB). Table 7.34 (in appendix A) summarises the significant moderating effects between best fit model ethical context and behaviour and the job retention and performance.

### **7.3.5 Tests for significant mean differences**

The Mann-Whitney U Test and Kruskal Wallis Test for detecting significant mean differences were conducted to test the research hypothesis Ha6: They were performed in order to establish whether the samples of participants differ significantly regarding the moderating effect of socio-demographic variables (age, gender, educational level, and tenure) in terms of the mean ranks on the ethical context and behaviour variables (CEVQ, ECQ, EWLQ) and job retention and performance (UWES, JSQ, OCS, OCBS). The Z-approximation test, which includes a correction

for ties in the data, was calculated and a probability value (p) of not less than or equal to .05 was considered, in order to determine the statistically significant differences.

#### *7.3.5.1 Test for significant mean differences with regard to ethical context and behaviour variables*

As Table 7.35 (in appendix 1) indicates, the Mann-Whitney U Test was conducted in order to determine whether clarity, congruency of supervisor, supportability, transparency and discussability demonstrate a difference according to gender. A significant difference ( $p = .038$ ) was statistically observed at the significance level of .01. Considering the mean rank, congruency of supervisor amongst the males is higher than amongst the females. No significant differences could be detected between gender groups in terms of clarity, supportability, transparency and discussability.

Table 7.36 (in appendix A) indicates the results of the Mann-Whitney U Test which was conducted in order to determine whether caring, law and codes, and independence climate demonstrate a difference according to gender. A significant difference ( $p = .004$ ) was statistically observed for law and codes at the significance level of .01. Considering the mean rank, law and codes of the males are higher than those of the females; no significant differences could be detected between gender groups in terms of caring and independence climate.

Table 7.37 (in appendix A) reports the findings of the Mann-Whitney U Test, conducted in order to determine whether power sharing, ethical guidance and role clarity demonstrate a difference according to gender groups. A significant difference ( $p = .020$ ) was statistically observed for power sharing at the significance level of .01. Considering the mean rank, congruency of supervisor amongst males is higher than that of the females. No significant differences could be detected between gender groups in terms of clarity, supportability, transparency and discussability.

As Table 7.38 (in appendix A) indicates, the Kruskal-Wallis H Test was conducted in order to determine whether clarity, congruency of supervisor, supportability, transparency and discussability of the participants demonstrated a significant difference according to age at the significance level of .05. The results revealed an  $X^2 = 20.880$ ,  $p = .000$  between clarity and age group;  $X^2 = 20.447$ ,  $p = .000$  between congruency of supervisor and age group;  $X^2 = 24.868$ ,  $p$

=.000 between supportability and age group;  $X^2 = 25.838$ ,  $p = .000$  between transparency and age group; and  $X^2 = 23.103$ ,  $p = .000$  between discussability and age group. Considering the mean rank, it was found that those between 31 and 55 years of age have greater clarity and supportability perceptions, whereas those aged 56 years and above have greater discussability and transparency perceptions.

Table 7.39 (in appendix A) indicates the results of the Kruskal-Wallis H Test which was conducted in order to determine whether caring, law and codes, and independence climate of the participants demonstrated a significant difference according to age at the significance level of .05. The results revealed an  $X^2 = 31.728$ ,  $p = .000$  between caring and age group;  $X^2 = 19.151$ ,  $p = .000$  between law and codes and age group; and  $X^2 = 18.107$ ,  $p = .000$  between independence and age group. Considering the mean rank, it was found that those participants aged 56 years and above have greater caring, law and codes and independence perceptions.

As Table 7.40 (in appendix A) indicates, the Kruskal-Wallis H Test was conducted in order to determine whether power sharing, ethical guidance and role clarification of the participants demonstrated a significant difference according to age at a significance level of .05. The results revealed an  $X^2 = 34.461$ ,  $p = .000$  between power sharing and age group;  $X^2 = 31.942$ ,  $p = .000$  between ethical guidance and age group; and  $X^2 = 31.697$ ,  $p = .000$  between role clarification and age group. Considering the mean rank, it was found that those between 31 and 55 years of age have greater ethical guidance perception. Those participants aged 56 years and above have greater power sharing and role clarification perceptions.

Table 7.41 (in appendix A) records the findings of the Kruskal-Wallis H Test which was conducted in order to determine whether clarity, congruency of supervisor, supportability, transparency and discussability of the participants demonstrated a significant difference according to educational level at a significance level of .05. As seen in Table 7.41 (in appendix A), there was an  $X^2 = 34.571$ ,  $p = .000$  between clarity and educational level;  $X^2 = 36.984$ ,  $p = .000$  between congruency of supervisor and educational level;  $X^2 = 23.608$ ,  $p = .000$  between supportability and educational level;  $X^2 = 237.146$ ,  $p = .000$  between transparency and educational level; and  $X^2 = 52.302$ ,  $p = .000$  between discussability and educational level. According to these findings, it may be stated that clarity, congruency of supervisor, supportability, transparency and discussability demonstrate a significant difference according to educational level. Considering the mean rank, it was found that those participants with a

doctorate degree have greater clarity, congruency of supervisor, supportability and discussability perceptions. However, those participants with a master's degree have a greater transparency perception.

As Table 7.42 (in appendix A) records, the Kruskal-Wallis H Test was conducted in order to determine whether caring, law and codes and independence of the participants demonstrated a significant difference according to educational level at a significance level of .05. As seen in Table 6.42 (in appendix 1), there was an  $X^2 = 41.344$ ,  $p = .000$  between caring and educational level;  $X^2 = 29.144$ ,  $p = .000$  between law and codes and educational level; and  $X^2 = 17.207$ ,  $p = .000$  between independence and educational level. According to these findings, it may be stated that caring, law and codes and independence demonstrated a significant difference according to educational level. Considering the mean rank, it was found that those participants with a master's degree have greater caring, law and codes and independence perceptions.

Table 7.43 (in appendix A) reports the results of the Kruskal-Wallis H Test which was conducted in order to determine whether power sharing, ethical guidance and role clarification of the participants demonstrated a significant difference according to educational level at a significance level of .05. As seen in Table 6.42 (in appendix 1), there was an  $X^2 = 38.322$ ,  $p = .000$  between power sharing and educational level;  $X^2 = 32.303$ ,  $p = .000$  between ethical guidance and educational level; and  $X^2 = 37.919$ ,  $p = .000$  between role clarification and educational level. According to these findings, it may be stated that power sharing, ethical guidance and role clarification demonstrated a significant difference according to educational level. Considering the mean rank, it was found that those participants with an Honours degree have a greater ethical guidance perception, while those participants with a Master's degree have greater power sharing and role clarification perceptions.

Table 7.44 (in appendix A) indicates the findings of the Kruskal-Wallis H Test, conducted in order to determine whether the clarity, congruency of supervisor, supportability, transparency and discussability of the participants demonstrated a significant difference according to tenure at a significance level of .05. As observed in Table 7.43 (in appendix A), there was an  $X^2 = 25.042$ ,  $p = .000$  between clarity and tenure;  $X^2 = 18.771$ ,  $p = .000$  between congruency of supervisor and tenure;  $X^2 = 16.224$ ,  $p = .000$  between supportability and tenure;  $X^2 = 19.934$ ,  $p = .000$  between transparency and tenure; and  $X^2 = 32.258$ ,  $p = .000$  between discussability and tenure. According to these findings, it may be stated that clarity, congruency of supervisor,

supportability, transparency and discussability demonstrated a significant difference according to tenure. Considering the mean rank, it was found that those participants with tenure of 16 – 20 years have greater clarity, congruency of supervisor, supportability, transparency and discussability perceptions.

Table 7.45 (in appendix A) indicates the results of the Kruskal-Wallis H Test which was conducted in order to determine whether the caring, law and codes and independence of the participants demonstrated a significant difference according to tenure at a significance level of .05. As evident in Table 7.44 (in appendix A), there was an  $X^2 = 42.099$ ,  $p = .000$  between caring and tenure;  $X^2 = 31.025$ ,  $p = .000$  between law and codes and tenure; and  $X^2 = 14.474$ ,  $p = .000$  between independence and tenure. According to these findings, it may be stated that caring, law and codes and independence demonstrated a significant difference according to tenure. Considering the mean rank, it was found that those participants with tenure of 6 – 10 years have greater caring and independence perceptions. However, those with tenure of 11-15 years have a greater law and codes perception.

As Table 7.46 (in appendix A) indicates, the Kruskal-Wallis H Test was conducted in order to determine whether the power sharing, ethical guidance and role clarification of the participants demonstrated a significant difference according to tenure at a significance level of .05. As seen in Table 6.45 (in appendix A), there was an  $X^2 = 25.135$ ,  $p = .000$  between power sharing and tenure;  $X^2 = 31.317$ ,  $p = .000$  between ethical guidance and tenure; and  $X^2 = 41.168$ ,  $p = .000$  between role clarification and tenure. According to these findings, it may be stated that power sharing, ethical guidance and role clarification demonstrated a significant difference according to tenure. Considering the mean rank, it was found that those participants with tenure of 16 – 20 years have greater power sharing, ethical guidance and role clarification perceptions.

#### *7.3.5.2 Test for significant mean differences with regard to the job retention and performance-related factors*

Tables 7.47, 7.48, 7.49, 7.50, 7.51, 7.52 and 7.53 (in appendix A) are of relevance to this section.

Table 7.47 (in appendix A) indicates the findings of the Mann-Whitney U Test which was conducted in order to determine whether dedication and absorption demonstrated a significant

difference according to gender group. A significant difference ( $p = .018$ ) was statistically observed at the significance level of .01. Considering the mean rank, it can be stated that the dedication of the males is higher than that of the females. No significant differences could be detected between gender groups in terms of absorption.

As Table 7.48 (in appendix A) indicates, the Mann-Whitney U Test was conducted in order to determine whether satisfaction with supervisor and satisfaction with work itself demonstrated a significant difference according to gender group. A significant difference ( $p = .027$ ) was statistically observed for satisfaction with work itself at the significance level of .01. Considering the mean rank, satisfaction with work itself was higher for males than for females. No significant differences could be detected between gender groups in terms of satisfaction with supervisor.

Table 7.49 (in appendix A) reports on the Mann-Whitney U Test which was conducted in order to determine whether affective, continuance and normative commitment demonstrated a significant difference according to gender group. No significant differences could be detected between gender groups in terms of affective, continuance and normative commitment.

Table 7.50 (in appendix A) provides the findings of the Mann-Whitney U Test, conducted in order to determine whether sportsmanship, courtesy and altruism demonstrated a significant difference according to gender group. A significant difference ( $p = .037$ ) was statistically observed for altruism at the significance level of .01. Considering the mean rank, it can be stated that the altruism of the males is higher than that of the females. No significant differences could be detected between gender groups in terms of sportsmanship and courtesy.

Table 7.51 (in appendix A) indicates the results of the Kruskal-Wallis H Test which was conducted in order to determine whether the dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment, sportsmanship, courtesy, and altruism of the participants demonstrated a significant difference according to age at the significance level of .05. The results revealed an  $X^2 = 12.655$ ,  $p = .005$  between dedication and age group;  $X^2 = 9.213$ ,  $p = .027$  between absorption and age group;  $X^2 = 22.726$ ,  $p = .000$  between satisfaction with supervisor and age group;  $X^2 = 21.516$ ,  $p = .000$  between satisfaction with work itself and age group;  $X^2 = 23.927$ ,  $p = .000$  between affective commitment and age group;  $X^2 = 25.005$ ,  $p = .000$  between continuance commitment and age group;  $X^2 = 36.830$ ,  $p =$

.000 between normative commitment and age group;  $X^2 = 40.489$ ,  $p = .000$  between sportsmanship and age group;  $X^2 = 36.061$ ,  $p = .000$  between courtesy and age group; and  $X^2 = 28969$ ,  $p = .000$  between altruism and age group. Considering the mean rank, it was found that those participants aged 56 years and above have greater dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment, sportsmanship, courtesy, and altruism perceptions.

Table 7.52 (in appendix A) contains the findings of the Kruskal-Wallis H Test, conducted in order to determine whether the dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment, sportsmanship, courtesy and altruism of the participants demonstrated a significant difference according to educational level at a significance level of .05. As seen in Table 6.40 (in appendix A), there was an  $X^2 = 17.754$ ,  $p = .001$  between dedication and educational level;  $X^2 = 16.763$ ,  $p = .002$  between absorption and educational level;  $X^2 = 34.162$ ,  $p = .000$  between satisfaction with supervisor and educational level;  $X^2 = 21.119$ ,  $p = .000$  between satisfaction with work itself and educational level;  $X^2 = 63.505$ ,  $p = .000$  between affective commitment and educational level;  $X^2 = 49.641$ ,  $p = .000$  between continuance commitment and educational level;  $X^2 = 57.186$ ,  $p = .000$  between normative commitment and educational level;  $X^2 = 71.401$ ,  $p = .000$  between sportsmanship and educational level;  $X^2 = 73.547$ ,  $p = .000$  between courtesy and educational level; and  $X^2 = 50.766$ ,  $p = .000$  between altruism and educational level. According to these findings, it may be stated that dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment, sportsmanship, courtesy and altruism demonstrated a significant difference according to educational level. Considering the mean rank, it was found that those participants with an Honours degree have greater dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment, sportsmanship, courtesy and altruism perceptions.

Table 7.53 (in appendix A) reports the results of the Kruskal-Wallis H Test, which was conducted in order to determine whether the dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment, sportsmanship, courtesy and altruism of the participants demonstrated a significant difference according to tenure at a significance level of .05. As seen in Table 6.40 (in appendix A), there was an  $X^2 = 17.754$ ,  $p = .001$  between dedication and tenure;  $X^2 = 16.763$ ,  $p = .002$  between absorption and tenure;  $X^2 = 34.162$ ,  $p = .000$  between satisfaction with supervisor and tenure;  $X^2 = 21.119$ ,  $p =$

.000 between satisfaction with work itself and tenure;  $X^2 = 63.505$ ,  $p = .000$  between affective commitment and tenure;  $X^2 = 49.641$ ,  $p = .000$  between continuance commitment and tenure;  $X^2 = 57.186$ ,  $p = .000$  between normative commitment and tenure;  $X^2 = 71.401$ ,  $p = .000$  between sportsmanship and tenure;  $X^2 = 73.547$ ,  $p = .000$  between courtesy and tenure; and  $X^2 = 50.766$ ,  $p = .000$  between altruism and tenure. According to these findings, it may be stated that dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment, sportsmanship, courtesy and altruism demonstrated a significant difference according to tenure. Considering the mean rank, it was found that those participants with tenure of 16 – 20 years have greater dedication, absorption, satisfaction with supervisor, continuance and normative commitment, sportsmanship, and courtesy perceptions. Participants with tenure of 6-10 years have a greater affective commitment perception; those with tenure of 11-15 years have greater satisfaction with work itself perceptions, whereas participants with tenure of less than one year have a greater altruism perception.

## **7.4 INTERPRETATION AND DISCUSSION OF RESEARCH RESULTS**

The integration and examination of the biographical profile of the sample, descriptive statistics, correlations, canonical correlations, multiple regressions, structural equation modelling, hierarchical moderated regression and the test for significant mean differences are now discussed.

### **7.4.1 Biographical profile of the sample**

The participants in the sample were predominantly employed males and fell within the age group of 26 to 40 (early/establishment career stage), had an honours degree and 6 to 10 years' experience, and were permanently employed in a railway organisation in the DRC. The biographical profile obtained for the sample showed that these were the main sample characteristics that had to be considered in the interpretation.

### **7.4.2 Descriptive statistics: interpretation of the results**

Tables 7.1, 7.2, 7.3, 7.4, 7.5, 7.6 and 7.7 are relevant to this section.

#### 7.4.2.1 *Ethical context and behaviour variables profile*

The ethical context and behaviour profile revealed that the participants possessed a high level of ethical culture, particularly feasibility and sanctionability. This in turn suggests that the participants perceive their organisation to create an atmosphere which enables them to comply with normative expectations (well-elaborated code of conduct). They also appear to be aware that unethical behaviour is not tolerated or even encouraged in their organisation. According to Kaptein (2011), individuals who have a higher level of feasibility and sanctionability also perceive their organisation to provide resources such as time, equipment and personal authority to act in accordance with the norms and values, which will enable them to perform their tasks responsibly.

The results also suggested that the participants perceive their organisation to discourage self-interested behaviour. They also perceive their organisation to adhere to the code and regulations of their profession and other authorities, and also comply with the requirements of the law and codes, in order to avoid breaking them. In line with research conducted by Martin et al. (2006), the results suggest that the participants' ethical decision-making and behaviour in the work environment are governed by external codes.

The results showed that the participants believe that their leaders are concerned about their impact on stakeholders and society. The participants also perceive that their leaders are involving them in the decision-making process listen to them and provide them with more control over matters concerning their jobs (Kalshoven et al., 2011). An ethical leader is perceived to be driven by a system of accepted beliefs and appropriate judgments, rather than self-interest, which is beneficial for followers, organisations and society (Kalshoven et al., 2011).

Overall, the results of the ethical context and behaviour variables profile of the participants suggested that the participants perceive their organisation to possess systems of behavioural control that are capable of promoting ethical behaviour. They also perceive that their organisation prescribes principles of right and wrong and creates an environment that helps to explain and predict unethical behaviour. The participants also perceive their leaders to be paying attention to sustainability issues, and considering the impact of their actions beyond the scope of their own workgroup, as well as demonstrating care about the welfare of the entire society (Kalshoven et al., 2011).

#### 7.4.2.2 *Job retention and performance-related factors*

The job retention and performance factors profile suggests that participants possess a high level of work engagement. This in turn suggests that they feel engaged in their work role. They appear to perceive their work environment as ethical, and have high energy and mental resilience, as well as being enthusiastic and proud. According to Schaufeli et al. (2006), individuals who show high levels of engagement are strongly and deeply absorbed in their work. Participants who are vigorous, enthusiastic, proud and absorbed tend to be engaged in their work role (Schaufeli et al., 2006).

The results showed that the participants experience their work environment to encourage good relationships and create opportunities for them to interact with others on the job. The results suggest that participants feel satisfied with their working conditions, having proper facilities and adequate variety, as well as challenges, discretion and scope for using their abilities and skills. The participants are given the opportunity for personal growth, and to increase their level of responsibility and social status. According to Yeh (2014), an individual who feels supported by his or her supervisor in the completion of tasks and who is provided with good working conditions and opportunities for training tends to show positive attitudes and behaviour in their work environment (Yeh, 2014). In line with research conducted by Budiman et al. (2014), individuals who are working in good conditions, with proper facilities and adequate pay, tend to be satisfied.

The results revealed that the participants possess a high level of commitment. This in turn suggests that the participants believe that it is morally right to continue to participate and stay for a long time in the organisation, because of the cost of leaving or the rewards of staying with the employer. The results also imply that the participants feel emotionally and affectively bound to the organisation. In line with research conducted by Budiman et al. (2014), the results suggest that individuals who believe that it is morally right to keep on interacting with the employer tend to extend their membership in the organisation. These results are consistent with the findings of Yeh (2014), who indicates that when individuals possess a high level of commitment, they tend to remain employed and stay for a long period of time in the same organisation.

The results show that the participants adhere to the rules, procedures and regulations of the organisation, and are punctual and accomplish their work efficiently. The results suggest that participants display gestures that help others to prevent interpersonal problems from occurring. This is in line with research conducted by Tambe and Shanker (2014), which indicated that when individuals have a high level of OCB, they tend to respect the rules and procedures, portray helping behaviour, and tolerate inconvenience and imposition of work without complaining.

### **7.4.3 Empirical research aim 1: Interpretation of the correlation results**

Research aim 1 was to empirically assess the nature of the statistical interrelationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance-related factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as manifested in a sample of respondents in the Railway organisation in the DRC.

#### *7.4.3.1 The relationship between ethical culture, ethical climate and ethical leadership*

Table 7.9 (in appendix A) is of relevance to this section.

All the ethical context and behaviour variables were significantly related. The results suggest that participants perceive a high level of ethical culture, ethical climate and ethical leadership. Research conducted by Kaptein (2011) and Sharif and Scandura (2014) reveals that individuals who perceive their organisation to have established ethical conduct and norms that indicate how ethical issues are resolved are likely to see their leaders as being consistent, acting as role models and deciding in an ethical manner. The positive correlation between ethical culture and caring climate suggests that individuals who perceive their work environment to be culturally and ethically positive are likely to view the organisation as having a concern for and consideration of others' well-being and interests (Martin et al., 2006).

The significant relationship observed between the participants' ethical culture and law and codes, rules and independence climate variables suggests that participants who perceive their work environment to have appropriate positive guidelines regarding how to act ethically are likely to adhere to the regulations of their profession, and are also likely not only to act in

accordance with their personal moral convictions when making decisions, but also to accept and embrace the rules and procedures that guide ethical behaviour. Research conducted by Mulki et al. (2006) indicates that when individuals respect the code of conduct, act according to their personal moral convictions and adhere to the regulations and procedures of their work environment, they will be more likely to display positive attitudes and behaviour in their organisation.

With regard to ethical culture and ethical climate, the results imply that the participants who perceive a positive ethical work environment are able to understand and comprehend their ethical conduct, norms, rules and values. According to the study conducted by Painter-Morland (2008), ethical culture is a system of behavioural control that is capable of promoting either ethical or unethical behaviour in the organisation. It is evident that employees working in such an environment will tend to adhere to and comply with the rules and regulations, and also use their moral convictions as a basis for their decisions. The above results are consistent with research conducted by Treviño et al. (2010), who found that ethical culture and ethical climate are directly related to ethical behaviour and attitudes.

A positive association was found between clarity and ethical climate and ethical leadership. The results imply that participants who perceive their organisation to have well-structured and clear ethical conduct, and who perceive that decisions are and should be based on an overarching concern for the well-being of others, are likely to see their leaders as being honest, treating them with fairness and respect, listening to them and clarifying their responsibilities, and acting with integrity. These findings are consistent with those of Kaptein (2011) and Huang, You and Tsai (2012), who indicate that when individuals perceive their organisation to have a positive code of conduct, and clear prescription procedures, policies and practices with moral consequences, they are more likely to view their leaders as role models who treat them with respect, dignity, honesty and integrity.

The results further suggest that participants' congruency of supervisor and congruency of management and ethical leadership were significantly related. This implies that participants who perceive their top and middle management to respect them, act according to the code of conduct, have consideration and concern for others, act in accordance with their personal moral convictions, accept the rules and adhere to the codes and regulations of their profession are more likely to see their leader as a role model, and to adopt the leader's behaviour. Conversely,

participants who perceive their board and middle management to engage in unethical behaviour, not respect the codes of conduct, and work for their own interests are more likely to perceive their leaders as unethical and less committed, and not complying with normative expectations. These findings are consistent with those of Huhtala et al. (2011) and Martin et al. (2006).

The results suggest that participants who perceive their organisation to provide them with the required resources, such as time, finances, equipment, information and personal authority to act according to its norms and values (feasibility), and who perceive their organisation to have prescribed procedures and policies, are likely to regard their leaders as role models who treat them with respect and dignity, and who act with integrity. According to Huhtala, Kangas, Lämsä and Feldt (2013), individuals who perceive their organisation to provide them with the necessary resources are likely to view their leaders as role models. In identifying with their leaders, they will act according to the norms and values, without feeling the need to break the rules.

The results also imply that participants, who perceive their work environment to be supportive, demonstrate a level of visibility and allow them to disclose or report wrong doings, and who perceive their organisation to have practices and procedures that have ethical dimensions, are more likely to see their leaders as role models, and as fair, trustworthy and honest. These findings are consistent with those of Kaptein (2008, 2011).

A positive association was found between sanctionability and ethical climate and ethical leadership. The results suggest that participants who perceive their organisation to reward ethical conduct and punish unethical conduct will be likely to meet ethical expectations and perceive their leaders as treating them with respect, dignity and honesty, and to act with integrity. According to Romàn and Munuera (2005), the more organisations reward ethical conduct and punish unethical conduct, the fewer violations will be noted.

The results also imply that the participants perceive a high level of instrumental climate in terms of their ethical culture. It appears that positive perceptions of clarity, congruency of supervisor and congruency of management, feasibility, supportability, transparency, discussability and sanctionability may reduce the negative influence of an instrumental climate. According to Huhtala et al. (2011), a lack of ethicality in the organisational culture can promote self-interest. When individuals perceive their organisation to have a clear code of conduct, and provide them

with the required resources and support, perceptibility and open discussion of ethical issues, they will be less likely to serve their own interests (Martin et al., 2006).

The results showed that ethical culture and ethical leadership were significantly related. This suggests that participants who perceive their work environment to be ethically positive are more likely to perceive their leaders as acting as a role model, who not only use rewards, but also punishment, to stimulate ethical conduct in the organisation. This is in line with research conducted by Kalshoven et al. (2011), which indicates that leaders who are perceived as role models tend to create a positive ethical work environment in which ethical culture and climate flourish. These findings are consistent with those of Paverse-Kaplan (2013), who found ethical culture to be positive correlated with ethical leadership.

The results also imply that participants who perceive their work environment to portray a positive ethical culture are more likely to perceive their leaders as acting with integrity, involving them in decision making, clarifying responsibilities, treating them with respect, holding them accountable for their actions, and keeping their promises consistently. These findings link to the study conducted by Treviño et al. (2010), who indicate that a leader who creates a positive and ethical work environment tends to act with integrity and involve his or her followers in the decision making process. These findings also support the culture theory (Schein, 2010), which holds that leaders are the primary architects of cultural norms, which subsequently influence all other organisational behaviour. Positive leadership values and a positive approach were found to be positively associated with culture types (Schaubroeck, Hannah, Avalio, Kozlowsky, Lord, Treviño & Peng, 2012).

#### *7.4.3.2 The relationship between work engagement, job satisfaction, organisational commitment and OCB*

Table 7.10 (in appendix A) is of relevance to this section.

All the job retention and performance-related factors were related. The results imply that the participants demonstrate a high level of engagement and job satisfaction. Research conducted by Hoon Song, Kolb, Hee Lee and Kyoung (2012) reveals that individuals who experience positive fulfilment and work-related affectivity when engrossed in their job are more likely to be engaged.

A positive association was found between work engagement and satisfaction with pay, promotion, co-workers, supervision and work itself. The results suggest that participants who perceive their organisation to pay them well, promote and respect their values, have a considerate, honest, fair and competent supervisor, and who are happy with their working conditions are likely to be energetic and resilient, enthusiastic, inspired and happily engrossed in their work. These findings are consistent with those of Hoon et al. (2012), who found work engagement to be positively related to employees' job satisfaction.

The results imply that participants who are energetic, resilient, inspired and proud, and who are happily engrossed in their work (high engagement) are likely to be emotionally and cognitively attached to their organisation. Research by Biswas and Bhatnagar (2013) also suggests that individuals who are engaged and attach a lot of personal meaning to their affiliation with their job and organisation are likely to stay for a long time with the employer. These findings are consistent with research conducted by Shuck, Ghosh, Zigarmi and Nimon (2013), who found work engagement to be positively associated with organisational commitment.

The findings further imply that participants who are vigorous, enthusiastic and proud, and who concentrate on their work, are likely to portray helping behaviour, be dedicated, tolerant, and encourage others to be good citizens of the organisation. According to Ariani (2014), individuals who are engaged in their job tend to create a favourable social context that is conducive to teamwork, helping, having a voice and other discretionary behaviours that can lead to organisational effectiveness. These findings are consistent with those of Adi (2012), who found work engagement to be related to OCB.

A positive association was found between job satisfaction and organisational commitment and OCB. The results suggest that participants who are satisfied with their jobs and work environment are likely to identify with, and be emotionally and cognitively bound to, the organisation. In line with research by Mogotsi, Boon & Fletcher (2011), individuals who are satisfied with the compensation, policies, work conditions and supervision tend to be psychologically and emotionally attached to the organisation. These findings are consistent with those of Qamar (2012), who found employees' job satisfaction to be positively related to organisational commitment.

The results also imply that those participants who are satisfied with their work conditions, salary, policy, support, working conditions and who are given the opportunity for promotion, personal growth and accomplishment, are likely to perform beyond the requirements of their contract. Participants who are satisfied with co-workers, supervision, promotion and work conditions tend to work beyond the boundaries of their job description. Participants who are satisfied with both monetary and social rewards such as recognition, policy and work conditions are likely to place a high value on these multiple rewards, and consequently feel obligated to reciprocate by engaging in discretionary work behaviour that benefits the organisation (Kizilos, Cummings & Cummings, 2013). These findings are consistent with those of Khan, Abdul and Rashid (2012), who found that employees' job satisfaction is positively related to OCB.

Furthermore, a positive association was found between organisational commitment and OCB. The results suggest that participants who are psychologically, emotionally and affectively committed to the organisation are likely to demonstrate helping behaviour and not only perform their jobs, but also contribute their time and energy to provide assistance beyond the formal obligations of the organisation. Organisational commitment reflects a psychological attachment and identification with the organisation, and committed employees tend to extend their membership with the latter. These findings are consistent with those of Spencer, Brown, Keeping and Lian (2014), who found that highly committed employees are preponderantly inclined to identify with the organisational values, and are willing to make an extra contribution in terms of extra-role behaviour in the organisation.

Overall, the results suggest that participants who are energetic, resilient, enthusiastic, inspired and proud, and happily concentrate on their work, and who are satisfied with the rewards, support, policy, personal growth and work conditions are likely to identify with and be psychologically attached to their organisation, and also be willing to demonstrate extra-role behaviour that contributes to the organisation. These findings are consistent with those of Biswas et al. (2013) and Saks (2006), who found that engaged individuals are likely to experience a pleasurable emotional state at work, and are more attached to the organisation. They also appear to engage in extra-role behaviour that benefits not only them, but also the entire organisation.

#### 7.4.3.3 *The relationship between the ethical context and behaviour variables and job retention and performance-related factors*

Table 7.11 (in appendix A) is of relevance to this section.

The results imply that the participants who perceive their work environment to support and establish an understandable, positive code of conduct, who are vigorous, enthusiastic, inspired, proud and happily engrossed in their work, and who are satisfied with the pay, policies, support, promotion and work conditions are more likely to psychologically identify with and be attached to the organisation, being also likely to engage in extra-role behaviour that benefits the organisation. These findings are consistent with those of Valentine, Godkin, Fleischman and Kidwell (2011), who found that when individuals perceive their organisation as providing a positive ethical culture, they tend to be engaged, satisfied, committed and respond favourably with discretionary behaviour that benefits the organisation.

The results suggest that participants who perceive their organisation to have clear ethical conduct that is comprehensive and understandable, who perceive their leaders to be committed to meeting the ethical expectations, who are provided with the required resources, support and personal authority to act according to the norms and values, without pressure to break the rules, and who are satisfied with the policies, support, rewards system and work conditions, are more likely to be psychologically attached to the organisation, as well as to engage in discretionary behaviour that is beneficial to the organisation. In line with research conducted by Huhtala et al. (2013), when individuals perceive their work environment to provide them with clear ethical conduct, they will be more likely to be engaged, satisfied, and remain in the organisation for a long period of time.

In addition, the results suggest that participants who perceive clear ethical conduct to exist in their organisation are likely to display both extra- and in-role behaviour. These findings are consistent with those of Rukkhum (2010), who found that a work environment which is characterised by a strong ethical culture and good work conditions may reduce turnover intention and increase the level of employees' satisfaction, engagement, commitment, achievement of organisational goals and performance.

Furthermore, the results suggest that participants who perceive their work environment to show a high level of visibility in exposing unethical behaviour, who are given the opportunity to discuss ethical issues, and who perceive that unethical behaviour is punished and ethical behaviour rewarded, are more likely to be emotionally engaged, satisfied and decide to stay for a long time with the employer, and may also engage in discretionary behaviour that benefits the organisation. According to Huthala et al. (2013), individuals who view their organisation as being ethical, who are energetic, enthusiastic, inspired and happily engrossed in their work, and who are happy with the support, policies, rewards and work conditions are likely to demonstrate positive attitudes towards work, be emotionally and cognitively bound to the organisation, and portray discretionary behaviour that is beneficial to it. These findings are consistent with those of Tong, Tak and Wong (2013), who found a positive and ethical work environment to be positively associated with a higher level of engagement, satisfaction, commitment and performance.

A positive association was found between ethical climate and work engagement, job satisfaction, organisational commitment and OCB. The results appear to indicate that participants who perceive their organisation to have a clear prescriptive code of conduct reflecting the organisational procedures, policies and practices, with moral consequences, and who are vigorous, resilient, enthusiastic and proud and happily concentrate on their work, are likely to be satisfied with their work environment, psychologically and emotionally committed to the organisation, and are likely to engage in discretionary behaviour. In line with research conducted by Yener, Yaldiran and Ergun (2012), individuals who perceive the existence of typical organisational procedures, practices, authority, ethical conduct, rewards and punishment are likely to be engaged, satisfied and committed to the organisation.

The results imply that those participants who perceive their organisation to foster a positive ethical climate or atmosphere are more likely to be engaged, satisfied with aspects of the job, identify with and be psychologically attached to the organisation, and are also likely to engage constantly in both in-role and extra-role behaviour that is beneficial to the organisation. These findings are consistent with those of Huang et al. (2012), who found that ethical climate was positively correlated with OCB.

Furthermore, the results seem to suggest that those participants who perceive a caring atmosphere concerning their well-being and interest in the work environment, who believe that they should act in accordance with their personal moral convictions when making ethical

decisions, who adhere to the code and regulations of their profession, and who accept and observe the rules and regulations that guide ethical behaviour, are more likely to be energetic, resilient, enthusiastic, inspired and proud, and happily concentrate on their work, as well as to be satisfied with different aspects of their job, be psychologically attached to the organisation, and engage in discretionary behaviour that is beneficial to the latter. In line with research conducted by Shin (2012), when individuals perceive a positive, caring work environment which allows them to utilise their personal convictions when making ethical decisions, they are more likely to be engaged, satisfied and committed, and to portray extra-role behaviour.

However, a negative association was found between instrumental climate and work engagement, job satisfaction, organisational commitment and OCB. The results also appear to indicate that those participants who perceive that members in their work environment look out for their own interests are less likely to experience vigour and dedication, will feel less absorbed in their job and are less likely to be psychologically bound to their organisation, as well as being less engaged in discretionary behaviour that is beneficial to the organisation. These findings are consistent with those of Elçi et al. (2009), Leung (2008), and Tsai and Huang (2008), who found the instrumental climate to be negatively related to employees' level of engagement, satisfaction, commitment and OCB.

A positive association was found between ethical leadership and work engagement, job satisfaction, organisational commitment and OCB. The results suggest that those participants who perceive their leader to act in a fair manner, demonstrate consistency and integrity, promote ethical conduct, have concern for them and share power are more likely to be energetic, resilient, enthusiastic and inspired, and to happily concentrate on their work. According to Walumbwa, Wang, Wang, Schaubroeck and Avolio (2010), when individuals perceive their leaders as a source of guidance and a role model who acts with integrity, they are more likely to be engaged in their work. These findings are consistent with those of Kalshoven et al. (2011) and Cheng, Chang, Kuo and Cheung (2014) who found that ethical leadership correlated positively with employees' job engagement.

The results also imply that participants who perceive their leaders to treat them fairly, promote ethical standards and act with integrity are likely to demonstrate positive feelings, and be satisfied with the rewards system, support from their supervisor, inter-relationships, policies and working conditions. In line with research conducted by Kim et al. (2011), when individuals

perceive their leaders to stimulate social exchange processes by sharing power and behaving fairly, they tend to be satisfied with the aspects of their work. These findings are consistent with those of Ghazali et al. (2013), who found that ethical leadership was positively related to employees' level of job satisfaction.

A positive association was found between ethical leadership and organisational commitment. The results seem to indicate that participants who perceive their leader to treat them with dignity, respect, empathy, justice and fairness are likely to identify with, and be psychologically and affectively attached to, the organisation. According to Den Hoogh et al. (2009), when individuals perceive their leaders to possess fairness, integrity and respect, and to allow them to take part in decision making and voice their opinions, they are likely to be affectively, continuatively and normatively attached to the organisation. These findings are consistent with those of Brown and Treviño (2006), who found ethical leadership to be positively related to employees' level of commitment. Similar research by Ghazali et al. (2013) revealed that organisational commitment was greater among workers whose leaders encourage power sharing, listen to their ideas, and promote and reward ethical conduct.

Furthermore, a positive association was found between ethical leadership and OCB. The results suggest that participants who perceive their leaders to stimulate social exchange, treat them equally, act with integrity, care about sustainability, and give them a voice are likely to reciprocate by showing positive work behaviours. According to Kalshoven et al. (2011), leaders who encourage appropriate and positive conduct by showing concern for others and stressing the importance of group members' welfare tend to stimulate employees' helping behaviours and loyalty, and stimulate their willingness to engage in discretionary behaviour such as OCB.

These findings are consistent with those of De Hoogh and Den Hartog (2009b) and Brown et al. (2006), who found ethical leadership to be positively associated with OCB.

Overall, the results suggest that participants who perceive their work environment to have a positive code of conduct, clear procedures, policies and practices, and who perceive their leader to treat them with respect, dignity and honesty, and to act with integrity are likely to be energetic, resilient, enthusiastic, proud and engrossed in their work. They are also likely to be satisfied with the rewards process, support from their supervisor and co-workers, and work conditions. Furthermore, they are likely to be engaged in extra-role behaviour that will benefit the organisation. These findings are consistent with those of Ezirim et al. (2012); Martin et al.

(2006); Tsai and Huang (2008); and Valentine et al. (2011), who found that ethical culture and ethical leadership were positively related to employees' level of engagement, organisational commitment, job satisfaction and organisational behaviour.

#### **7.4.4 Empirical research aim 2: Interpretation of canonical correlations results**

Research aim 2, and Tables 7.12 and 7.13 (in appendix A), are of relevance to this section.

Research aim 2 was to empirically assess the nature of the overall statistical relationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, as a composite set of independent latent variables and the job retention and performance-related factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB as a composite set of dependent latent variables.

Overall, the results suggest that the ethical context and behaviour variables (congruency of supervisor, discussability, supportability and transparency, clarity, caring, law and codes, independence, power sharing, ethical guidance, and role clarification) significantly contributed towards explaining the participants' job retention and performance-related factors (especially dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective commitment, continuance commitment, normative commitment, courtesy, sportsmanship, and altruism).

The results imply that congruency of supervisor, discussability, supportability, transparency, and clarity positively influenced the participants' level of dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective commitment, continuance commitment, normative commitment, courtesy, sportsmanship, and altruism. The results also appear to suggest that participants who perceive a favourable ethical working environment are likely to be engaged, satisfied with aspects of their jobs, committed to the organisation, and to engage in discretionary behaviour. According to Huhtala et al. (2011), ethical culture seems to represent a favourable ethical working environment that may promote individuals' behaviour and attitudes, such as engagement, satisfaction, commitment and OCB.

Furthermore, the results suggest that law and codes, caring and independence positively influence participants' level of engagement, satisfaction, commitment and OCB. In other words,

the participants believe that their organisation promotes respect for rules and law, and that decisions are and should be based on an overarching concern for not only the well-being of others, but also the personal moral convictions of the decision maker. This in turn implies that when participants perceive their organisation to have a clear structure, policies, rules and regulations, this may increase their level of engagement, satisfaction, commitment and OCB. According to Martin et al. (2006), individuals who adhere to the required law and code and who believe that they should use personal moral convictions when making ethical decisions tend to be engaged, satisfied, committed to the organisation, and show extra-role behaviour that benefits the organisation. The findings are consistent with those of Brown et al. (2006), who indicate that when behaviour is perceived to be ethical, these perceptions influence ethical decision making and behaviour of organisational members, as well as their attitudes towards the individual job.

It was also observed that ethical leadership influenced employees' level of engagement, satisfaction, commitment and OCB. This implies that positive moral leadership is characterised by honesty, respect for others, and integrity, which may enhance employees' positive behaviour and attitudes towards the organisation. According to Den Hartog and Belschak (2012), ethical leaders are value-driven and employees identify strongly with the values articulated and enacted by the leader; this may make employees feel engaged, satisfied with and attached to the organisation, and encourage them to engage in discretionary behaviour that benefits their organisation. These findings are consistent with those of Den Hartog et al. (2012), who found that ethical leaders help employees to see their job as more meaningful, which translates into increased effort and productive behaviour. Thus, employees of ethical leaders are likely to be engaged, committed, and satisfied, and to demonstrate extra-role behaviour. These findings are in line with those of Piccolo, Greenbaum, Den Hartog and Folger (2010), who indicate that value-based leadership that makes work more significant and meaningful to employees is likely to enhance their dedication, absorption, and willingness not only to invest their efforts, but also to be satisfied with and committed to the organisation, and to engage in discretionary behaviour that benefits it.

Overall, it would appear from the findings that an increase in participants' perception of a favourable working environment (ethical culture), ethical climate, and ethical leadership, may enhance their level of work engagement, satisfaction, commitment and citizenship behaviour.

#### **7.4.5 Empirical research 3: Interpretation of the multiple regression results**

Research aim 3 and Tables 7.14, 7.15 and 7.16 (in appendix A) are of relevance to this section.

Research aim 3 was to empirically assess whether or not the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership positively and significantly predict the job retention and performance-related factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

##### *7.4.5.1 Ethical culture as a predictor of work engagement, job satisfaction, organisational commitment and OCB*

Table 7.14 (in appendix A) is of relevance to this section.

The results showed that ethical culture (clarity, congruency of management, congruency of supervisor, feasibility, supportability, transparency, discussability and sanctionability) significantly and positively predicted work engagement, job satisfaction, organisational commitment and OCB. The results also suggest that ethical organisational culture is important in explaining employees' behaviour and attitudes.

Those participants who perceive their work environment to be ethical were able to demonstrate a high level of engagement, satisfaction, commitment and OCB. Research conducted by Huhtala et al. (2011) indicates that ethical culture represents a favourable working environment which tends to promote employees' behaviour and attitudes. It became evident that if the organisational culture is ethical, employees will tend to be psychologically, emotionally and cognitively connected to the organisation, and to be engaged in helping behaviour.

However, negative associations were found between clarity and job satisfaction and transparency and work engagement. This implies that individuals who perceive their working environment as being unfavourable and less ethical are less likely to be satisfied with and engaged in their work. According to Treviño, Weaver and Reynolds (2006), if the organisational culture lacks a well-defined set of ethical standards, it can be a key source of low engagement, low satisfaction, and low employee commitment. If (un)ethical conduct and its consequences

are not visible, then this may lower the levels of job satisfaction and engagement (Kaptein, 2011).

#### *7.4.5.2 Ethical climate as a predictor of work engagement, job satisfaction, organisational commitment and OCB*

Table 7.15 (in appendix A) is of relevance to this section.

The results reveal that ethical climate (law and codes, caring, independence and rules) positively predicted work engagement, job satisfaction, organisational commitment and OCB. This implies that high levels of law and codes, caring, independence and rules are associated with high levels of work engagement, job satisfaction, organisational commitment and OCB. Martin et al. (2006) and Yener et al. (2012) maintain that a high level of positive ethical climate enables individuals to be emotionally and affectively engaged, satisfied with policies, procedures and regulations, and to be committed and engage in extra-role behaviour that benefits the organisation. Research conducted by Ünäl (2012) revealed that organisations that exhibit strong ethical values may benefit from having more engaged, satisfied, committed and productive employees. Individuals who perceive their organisations as being ethical are likely to regard their organisations as being fair to them, and will therefore be likely to reciprocate with positive job attitudes and behaviour, such as engagement, satisfaction, commitment and extra-role behaviour (Wang & Hsieh, 2012).

However, negative associations were found between instrumental ethical climate and work engagement, job satisfaction, organisational commitment and OCB. The results suggest that the stronger the instrumental ethical climate, the lower the employees' level of engagement, satisfaction, commitment and OCB. Wang et al. (2012) maintain that individuals who perceive that people look out for their own interests in the organisation are less likely to be engaged, satisfied and committed, and to engage in extra-role behaviour. These findings are consistent with those of Huang, You and Tsai (2012), Yener et al. (2012) and Wang et al. (2012), who found that instrumental climate was negatively associated with work engagement, job satisfaction, organisational commitment and OCB.

#### 7.4.5.3 *Ethical leadership as a predictor of work engagement, job satisfaction, organisational commitment and OCB*

Table 7.16 (in appendix A) is of relevance to this section.

The results reveal that ethical leadership (people orientation, fairness, power sharing, and concern for sustainability, ethical guidance, role clarification and integrity) significantly predicted work engagement, job satisfaction, organisational commitment and OCB. A high level of ethical leadership is associated with a higher level of positive attitudes, and physical and emotional connection to the organisation, which leads individuals to be committed and engage in extra-role behaviour.

Kim and Brymer (2011) maintain that positive perceptions of an ethical leader as treating others with fairness, respect, and honesty, acting with integrity and not displaying self-interested behaviour, may enhance positive relationships with employees, which in turn contribute to positive work outcomes, such as work engagement, satisfaction and commitment. According to Neubert, Carlson, Kacmar, Robert and Chanko (2009), an ethical leader should create a strong positive and moral atmosphere for the whole organisation, which could stimulate employees to be engaged, satisfied and committed, and to engage in extra-role behaviour that is beneficial to the organisation. This is consistent with the findings of Brown and Treviño (2006) and Kalshoven et al. (2011), who found that ethical leadership positively influenced employees' attitudes and behaviours (e.g. engagement, satisfaction, commitment and OCB).

#### **7.4.6 Empirical research aim 4: Interpretation of the structural equation modelling results**

Research aim 4, Table 7.17 (in appendix 1) and Figure 7.1 (in appendix A) are of relevance to this section.

Research aim 4 was based on the overall statistical relationship between the ethical context and behaviour variables (conceptualised as ethical culture, ethical climate and ethical leadership) and the job retention and performance-related factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), to determine whether there are a good fit

between the elements of the empirically manifested structural model and the theoretically hypothesised model.

It emerged from the results that addressing the ethical culture aspects of congruency of supervisor and transparency may contribute negatively to the development of job retention and performance-related factors of work engagement (dedication and absorption), job satisfaction (satisfaction with supervisor and satisfaction with work itself), organisational commitment (affective, continuance and normative commitment), and OCB (sportsmanship, courtesy and altruism). It was evident that the participants' lower evaluation of congruency of supervisor and transparency may decrease their level of engagement, satisfaction and commitment to the organisation and this may in turn lead to low performance. Poor evaluations of ethical culture represent an unfavourable work environment (Huhtala et al., 2011). According to research conducted by Kaptein (2011), individuals who perceive their management board and supervisor not to be committed to meeting ethical expectations, and who see that ethical and unethical conduct and its consequences are not visible, may be less likely to be emotionally and affectively satisfied with and committed to the organisation. Supervisors' lack of a good example in terms of ethics and low visibility or transparency may decrease employees' performance and increase their turnover intention (Kaptein, 2009).

It appears that employees who perceive their organisation as having concrete and clear norms, rules, and values that are understandable, and stimulate them to identify with, be involved in and commit themselves to the ethical expectations, and give them the opportunity to raise and discuss ethical issues, are likely to be satisfied, engaged, committed to the organisation, and to engage in discretionary behaviour. According to Huhtala et al. (2011), if the organisational culture does embody ethical values, then this can represent a favourable work environment and increase employees' level of productivity and helping behaviour, and reduce their intention to quit. Research conducted by Young (2012) revealed that a working environment with ethical virtues can promote positive attitudes and behaviour. Individuals who perceive their organisation to have concrete and clear ethical standards and practices are likely to be emotionally and affectively connected to the organisation, satisfied with their working conditions and support, and committed to the organisation, which in turn can lead them to engage in extra-role behaviour that is beneficial to the latter (Huhtala et al., 2011).

It also appears that employees who perceive their work environment to emphasise concern for their well-being, who comply with the law and regulations of their profession, and who adhere to their personal ethical beliefs, are likely to be enthusiastic and inspired, happily concentrate on their job, be satisfied with the support and working conditions, identify with their organisation, and demonstrate discretionary behaviour. Research conducted by Yener et al. (2012) revealed that individuals who perceive a positive ethical climate in their organisation are likely to be engaged, satisfied and committed, and to engage in discretionary behaviours that are not directly and explicitly recognised by the formal rewards system. Individuals who perceive a good atmosphere in the organisation tend to be engaged, have a sense of energy and effective connection with their work activities, satisfied with the support and working conditions, and tend to increase the frequency of behaviours that promote efficient and effective functioning of the organisation (Martin et al., 2006; Zehir et al., 2012).

It would appear that employees who perceive their leader as involving them in the decision making process, listening to their ideas, clarifying responsibilities, expectations and performance goals, and helping them to set priorities and convey standards regarding ethical conduct, tend to be engaged, satisfied, committed and display citizenship behaviour. According to Kim et al. (2011), ethical leaders who treat employees fairly, with respect, consideration, sincerity and honesty may play a critical role in enhancing their levels of engagement, satisfaction and commitment, including discretionary behaviour. This is consistent with the findings by Neubert et al. (2009), who indicate that ethical leaders should create a strong moral atmosphere that is conducive to positive employees' attitude and behaviour.

Furthermore, employees who perceive their leaders to be open, listen to their ideas, involve them in the decision-making process, clarify expectations and hold them accountable for their actions, are likely to be enthusiastic, inspired, and proud of their work. Cheng, et al. (2014) assert that, when ethical leaders dedication is based on the SLP, employees will learn and emulate their behaviour, thereby increasing work motivation and energy in relation to their work. These findings are consistent with those of Babcock-Roberson et al. (2010), who found leadership to be positively related to employees' work engagement.

It also appears that employees who are satisfied with their working conditions, the rewards system and support from the organisation are likely to demonstrate courtesy and consult their colleagues before taking any action. According to Mohammad, Habib and Alias (2011),

individuals who perceive themselves to be treated fairly, consulted and promoted tend to be satisfied with their work and willing to reciprocate by expressing and displaying positive attitudes and behaviour that are beneficial to the organisation. This is consistent with the findings by Mehboob and Bhutto (2012), who indicate that employees are more likely to display OCBs when they feel satisfied with their working conditions and support from the organisation.

The results suggest that employees who perceive their supervisor to be understanding, friendly, offer praise for good performance, and listen to their opinions are more likely to feel obliged to remain in their respective organisation because of social norms. According to Lumley, Coetzee, Tladinyane and Ferreira (2011), individuals who are satisfied tend to be committed to an organisation, and those who are satisfied and committed are more likely to attend work, stay with an organisation, perform well and engage in extra-role behaviour that is beneficial to it. These findings are consistent with those of Chey-Koh and Boo (2004), who found job satisfaction to be positively related to employees' organisational commitment.

Overall, the findings appear to suggest that the participants who perceived their work environment as ethical were psychologically and emotionally connected to the organisation, satisfied with their working conditions, committed to their organisation, and engaged in positive behaviours. The findings also suggest that individuals who perceive their work environment to have a clear code of conduct, rules, regulations and procedures, and who perceive their leaders as role models are likely to be engaged in their work, satisfied with aspects of their job, committed to the organisation and engaged in discretionary behaviour that benefits the organisation.

#### **7.4.7 Empirical research aim 5: Interpretation of the hierarchical moderator regression results**

Research aim 5, and Tables 7.19, 7.20, 7.21, 7.22, 7.23, 7.24, 7.25, 7.26, 7.27, 7.28, 7.29, 7.30, 7.31, 7.32, 7.33 and 7.34 (in appendix A) are of relevance to this section.

Research aim 5 was to empirically assess whether or not the biographical characteristics (age, gender, educational level and tenure) significantly moderate the relationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical

leadership and the job retention and performance-related factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

#### 7.4.7.1 *Gender as a moderator*

.Gender seemed to significantly moderate the said relationship. A significant interaction effect was observed for gender in terms of the relationship between the ethical context and behaviour variables of ethical culture (supportability) and ethical climate (law and code) and the job retention and performance-related factors of organisational commitment (affective commitment) and job satisfaction (satisfaction with supervisor). Gender may influence individuals' perception of supportability and law and code, which in turn may influence their satisfaction with supervisor and affective commitment, especially in terms of the job retention and performance-related factors in their work environment. It is interesting to note that the relationship between supportability and law and code, and affective commitment and satisfaction with supervisor, was stronger for female participants than for males. Female participants who scored higher on both supportability and law and codes also had a higher level of affective commitment and satisfaction with supervisor than males. The results are consistent with those of Sower and Sower (2004), who found that men and women are different in terms of what they consider to be ethical or unethical.

The results showed that gender moderated the relationship between supportability and satisfaction with supervisor. The results suggest that gender may influence participants' perception that their work environment provides support for the management and employees, which leads them to identify and meet ethical expectations, which will in turn influence their job retention and performance-related factors, especially their satisfaction with supervisor, which may lead them to increase their intention to stay and engage in discretionary behaviour that is beneficial to the organisation (Wang et al., 2012).

The results also showed that gender moderated the relationship between law and codes and affective commitment. This implies that gender may influence individuals' perception of their organisation as being ethical, which may in turn influence their job retention and performance-related factors, especially affective commitment, which means that they will be more inclined to stay for a long time with the organisation. These findings are consistent with those of Wang and Hsieh (2011), who indicate that when individuals comply with the law and professional

standards (law and codes climate), they will be more likely to be emotionally attached to the organisation. Employees who perceive their organisation to possess clear policies, procedures, regulations and practices are likely to extend the length of their membership with the employer (DeConinck, 2010).

Overall, it appears that female employees are likely to perceive their work environment as being favourable, which in turn leads them to be satisfied with the support from, and be emotionally attached to, the organisation.

#### 7.4.7.2 *Age as a moderator*

Age seemed to significantly moderate the relationship between the ethical context and behaviour variables and the job retention and performance-related factors. A significant interaction effect was observed for age in terms of the relationship between the ethical context and behaviour variable of ethical culture (clarity, congruency of supervisor, supportability, transparency, and discussability), ethical climate (caring, law and codes and independence) and ethical leadership (power sharing, ethical guidance and role clarification), the job retention and performance-related factors of work engagement (dedication, and absorption), organisational commitment (affective, continuance and normative commitment) and job satisfaction (satisfaction with supervisor, satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism). Age may influence participants' perception of their favourable ethical work environment, which may in turn influence their job retention and performance-related factors, especially their sense of significance, enthusiasm, inspiration, pride and challenge, and lead to them fully concentrating on and being emotionally attached to the organisation, which will in turn influence their intention to stay.

It is interesting to note that the relationship between ethical culture, ethical climate and ethical leadership and work engagement, commitment, satisfaction and OCB was stronger for younger participants (of  $\leq 40$  years) than for the older age group ( $> 40$  years). Younger participants who scored higher on clarity, congruency of supervisor, supportability and transparency, and caring, law and codes and independence, and power sharing, ethical guidance and role clarification, also recorded higher levels of dedication and absorption, affective, continuance and normative commitment, satisfaction with supervisor and satisfaction with work itself, and sportsmanship, courtesy and altruism.

The participants were mostly between 25 and 40 years of age: this is the early and establishment of career life stage, which is characterised by physical energy, health, higher instinctive drivers, and respect for regulations and rules (Schreuder & Coetzee, 2011). These findings are also consistent with those of Innanen, Tolvanen and Salmela-Aro (2014), who found that early career employees who perceive their working environment as being ethical are more likely to be enthusiastic, inspired and to happily concentrate on their work. They are also likely to be involved in and reasonably committed to their organisation, and to engage in extra-role behaviour that is beneficial to the latter (Innanenet al., 2014).

The results also demonstrated that age moderated the relationship between ethical culture (clarity, congruency of supervisor, supportability, transparency, and discussability) and job satisfaction (satisfaction with supervisor, satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism). These findings suggest that age may influence individuals' perception of their organisational culture as ethical, which may in turn influence job retention and performance-related factors, especially their satisfaction with a competent and fair supervisor, working conditions, and clear standardised procedures, and this may in turn lead them to be more positive towards work issues, help other members of the organisation in their work, and encourage those who are demoralised about their professional development. These findings are consistent with those of Ruiz-Palomino et al. (2013), who found that endorsing ethics through the organisational culture is a potentially useful way of keeping employees satisfied, and increasing their willingness to stay and show discretionary behaviour. These findings are also consistent with those of Valentine et al (2011), who indicate that individuals who perceive their work environment to be ethically favourable are likely to be satisfied with their supervisor and working conditions, and to help, encourage, and engage in supportive discretionary behaviour.

In addition, the results showed that age moderated the relationship between ethical climate (caring, law and codes and independence) and work engagement (dedication, absorption) and organisational commitment (affective, continuance, normative commitment). This implies that age may influence individuals' perception of the procedures, policies and practices in their organisation as being in line with ethical behaviour, which may in turn influence job retention and performance-related factors, especially enthusiasm, sense of significance, concentration on their work, and level of emotional attachment to the organisation, as well as influencing their intention to stay with it. These findings are consistent with those of Terpstra et al. (1993), who

found that individuals tend to become more ethical as they grow, which may help them to be energetic, resilient, enthusiastic, inspired and happily engrossed in their work, and in turn may result in them deciding to stay with the employer for a long period of time. Individuals who are enthusiastic, inspired and proud, and who concentrate on their job, are more likely to be emotionally attached to their organisation (Yener et al., 2012).

The results also indicated that age moderated the relationship between ethical climate (caring, law and codes and independence) and job satisfaction (satisfaction with supervisor and satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism). The findings imply that age may influence individuals' perception of expected ethical standards and norms for decision-making, which may in turn influence job retention and performance-related factors, especially satisfaction with fair treatment from the supervisor, clear standardised procedures and working conditions, and may also influence their intention to engage in discretionary behaviour that is beneficial to the organisation. These findings are consistent with those of Jaramilo et al. (2006), who found that a positive ethical climate has a positive effect on employees' satisfaction with support, fair treatment, and working conditions, which in turn may lead to a lower level of employee turnover, greater emotional attachment to the organisation, and better job performance.

Furthermore, the results revealed that age moderated the relationship between ethical leadership (power sharing, ethical guidance, role clarification) and work engagement (dedication, absorption) and organisational commitment (affective, continuance, normative commitment). The implication is that age may influence individuals' perception of leaders as involving them in the decision making process, listening to them, clarifying their responsibilities, expectations and performance goals, and conveying standards regarding ethical conduct, which may in turn influence job retention and performance-related factors, especially dedication and absorption, which will lead them to be enthusiastic and engrossed in their job, which may in turn lead them to be emotionally attached to the organisation or to intend to stay with the employer. These findings are consistent with those of Piccolo, Greenbaum, Den Hartog et al. (2010), who found that individuals who perceive their leaders as increasing their sense of control, broadening individual responsibilities and creating a sense of psychological meaningfulness are more likely to be engaged in and committed to the organisation.

The results also disclosed that age moderated the relationship between ethical leadership (power sharing, ethical guidance, role clarification) and job satisfaction (satisfaction with supervisor and satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism). The suggestion is that age may influence individuals' perception of leaders as involving them in the decision making process, listening to them, clarifying their responsibilities, expectations and performance goals, and conveying standards regarding ethical conduct, which may in turn influence job retention and performance-related factors, especially satisfaction with a competent and fair supervisor, which may in turn lead them to engage in helping behaviour and encourage their colleagues to engage in extra-role behaviours. These findings are consistent with those of Kalshoven et al. (2011), who found that individuals, who feel supported, cared for and fairly treated are more likely to develop satisfaction and be willing to engage in discretionary behaviour. An ethical leader who establishes a model for appropriate behaviour and who uses rewards and punishment to stimulate a sense of morality may, in turn, influence employees to develop positive behaviour and engage in helping behaviour (Tai, Chang, Hong & Chen, 2012).

#### *7.4.7.3 Educational level as a moderator*

Educational level seemed to significantly moderate the relationship between the ethical context and behaviour variables and the job retention and performance-related factors. A significant interaction effect was observed for educational level in terms of the relationship between the ethical context and behaviour variables of ethical culture (clarity, congruency of supervisor, supportability, transparency, and discussability), ethical climate (caring, law and codes and independence), ethical leadership (power sharing, ethical guidance, role clarification), and the job retention and performance-related factors of work engagement (dedication and absorption), organisational commitment (affective, continuance and normative commitment), job satisfaction (satisfaction with supervisor and satisfaction with work itself), and OCB (sportsmanship, courtesy and altruism). Educational level may influence individuals' perception of their organisation as a favourable ethical working environment with clear procedures, policies and practices, where leaders act with integrity, respect and honesty, which may in turn influence individuals' level of engagement (dedication and absorption), organisational commitment (affective, continuance and normative commitment), job satisfaction (satisfaction with supervisor and satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism), especially in terms of job retention and performance-related factors in their work environment. It is interesting to note that the relationship between clarity, congruency of supervisor, supportability,

transparency and discussability, caring, law and codes, and independence, power sharing, ethical guidance and role clarification, dedication and absorption, affective, continuance and normative commitment, satisfaction with supervisor and satisfaction with work itself, and sportsmanship, courtesy and altruism was stronger for the undergraduate participants (< 5) than for the postgraduate participants (> 5 years of educational level).

Undergraduate participants who scored higher on the ethical context and behaviour variables also exhibit significantly higher levels of engagement, commitment, satisfaction and citizenship behaviour. This is consistent with the study by Shakeel, Hhan and Khan (2011), who found that educated employees who perceive their work environment to be ethical, who perceive there to be clear procedures, policies and practices aligned with ethical behaviour in their organisation, and who view their leader as a role model are likely to be resilient, enthusiastic, happily engrossed, emotionally attached to the organisation, and satisfied with their working conditions, which may in turn lead them to be willing to engage in extra-role behaviour.

The results showed that educational level moderated the relationship between ethical culture (clarity, congruency of supervisor, supportability, transparency, and discussability) and job retention and performance-related factors of work engagement (dedication, absorption), and organisational commitment (affective, continuance, normative commitment). The results suggest that educational level may influence individuals' perception of their organisation's culture as ethical, which may in turn influence their job retention and performance-related factors, especially their level of resilience and concentration on work, and this may lead them to be emotionally attached to the organisation. These findings are consistent with those of Kaptein (2011), who found that knowledgeable individuals tend not only to see their work environment as ethical, but also demonstrate a higher level of engagement and commitment.

The results furthermore made it clear that educational level moderated the relationship between ethical culture (clarity, congruency of supervisor, supportability, transparency, and discussability) and job satisfaction (satisfaction with supervisor, satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism). Educational level may also influence individuals' perception of their work environment as being ethical, which may in turn influence job retention and performance-related factors, especially satisfaction with fair treatment and working conditions, which means that they are more likely to be devoted and willing to engage in helping, encouraging and positive attitudes, which may in turn lead them to engage in

discretionary behaviour and increase their job performance. These findings are consistent with those of Ruiz-Palomino et al. (2011), who found that educated people who perceive their working environment as ethical are more likely to be satisfied with a competent and friendly supervisor, which may in turn encourage them to engage in supportive discretionary behaviour and increase their intention to stay.

The results also indicated that educational level moderated the relationship between ethical climate (caring, law and codes and independence) and work engagement (dedication, absorption) and organisational commitment (affective, continuance, normative commitment). Educational level may also influence individuals' perception of their organisation's procedures, policies and practices, which may in turn influence their job retention and performance-related factors, especially their psychological attachment, which in turn leads to them being enthusiastically and happily engrossed in their work, which may reduce absenteeism and the intention to quit. These findings corroborate the research conducted by Yener et al. (2013), who found ethical climate to influence employees' work engagement and commitment.

Furthermore, the results afforded evidence that educational level moderated the relationship between ethical climate (caring, law and codes and independence) and job satisfaction (satisfaction with supervisor and satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism). Educational level may influence individuals' perception of their organisation's procedures, policies and practices, which in turn may influence their job retention and performance related factors, especially satisfaction with fair treatment and working conditions, which may in turn lead them to engage in discretionary efforts for the good of their organisation. These findings are consistent with those of Ma' amor, Ann, Munir and Hashim (2012), who reported that when employees achieve a good ethical match with their organisation, they are more likely to be satisfied with the support from the it and their working conditions, which may in turn increase their willingness to undertake extra-role behaviour that benefits their organisation.

The results also indicated that educational level moderated the relationship between ethical leadership (power sharing, ethical guidance, role clarification) and work engagement (dedication, absorption) and organisational commitment (affective, continuance, normative commitment). Educational level may also influence individuals' perception of their leaders as involving them in the decision making process, setting clear ethical conduct and clarifying their responsibilities, which may in turn influence their job retention and performance-related factors,

especially dedication to and concentration on their work, which may in turn lead them to feel emotionally attached to, obligated to stay or extend their membership with the employer. These findings corroborate the research conducted by Den Hartog et al. (2012), who found that when individuals perceive their leaders as ethical or to be acting with integrity, they are likely to be resilient, and enthusiastically and happily engrossed in their work, which may in turn lead to a greater commitment to the organisation.

Lastly, the results showed in addition that educational level moderated the relationship between ethical leadership (power sharing, ethical guidance, role clarification) and job satisfaction (satisfaction with supervisor and satisfaction with work itself) and OCB (sportsmanship, courtesy and altruism). Educational level may also influence individuals' perception of their leaders as role models, which may in turn influence their job retention and performance-related factors, especially satisfaction with their competent supervisor and fair treatment, which may lead them to display positive attitudes and behaviours that are good for the organisation. These findings are also consistent with those of Steyrer et al. (2008), who found that individuals who perceive their leaders to encourage participation in decision making, and treat them with consideration, fairness and care, are likely to be satisfied with their jobs and support (positive work experience), which may in turn lead them to reciprocate by expressing positive attitudes and behaviour that benefit the organisation.

Overall, it would appear that employees with an undergraduate education perceived their organisation's culture as ethical, and their leaders as treating them with fairness, respect and dignity, and that they are engaged, satisfied, committed and engage in discretionary behaviour that is good for the organisation.

#### *7.4.7.4 Tenure as a moderator*

The results revealed that tenure moderated the relationship only with ethical culture (clarity, congruency of supervisor and discussability) and work engagement (dedication and absorption) and OCB (sportsmanship and courtesy). Tenure may also influence individuals' perception of their work environment as ethically favourable, which may in turn influence job retention and performance-related factors, especially dedication and concentration on their work, which may lead them to engage in extra-role behaviour that is beneficial to the organisation. It is interesting to note that the relationship between clarity, congruency of supervisor, and discussability, and

dedication and absorption, and sportsmanship, courtesy and altruism was stronger for the participants with less experience ( $\leq 5$  years) than for those with more experience ( $> 5$  years).

Experienced participants who scored higher on the ethical context and behaviour variables also recorded a significantly higher level of engagement and citizenship behaviour. Tenure may influence participants' perception of their working environment as being ethical, which may in turn influence their sense of significance and concentration on their work, and this may in turn lead them to engage in positive attitudes and behaviours that are good for the organisation. These findings are consistent with those of Pierce and Sweeney (2010), who found that greater experience in management may influence individuals' perception of their organisation's culture as being ethical and their awareness of what is ethically acceptable. This may in turn help them to be willing to engage in OCBs that are beneficial to the organisation.

Overall, it appears that employees with greater experience in management perceive their work environment as being ethically favourable, and they are resilient, enthusiastic, inspired and happily engrossed in their work, and also engage in discretionary behaviour.

#### **7.4.8 Empirical research aim 6: Interpretation of the tests for significant mean differences results**

The following section will interpret the test for mean differences of the ethical context and behaviour, job retention and performance and the biographical characteristics.

##### *7.4.8.1 Interpretation of the tests for significant mean differences results of the ethical context and behaviour variables*

Research aim 6, and Tables 7.35, 7.36, 7.37, 7.38, 7.39, 7.40, 7.41, 7.42, 7.43, 7.44, 7.45, and 7.46 (in appendix A) are of relevance to this section.

Research aim 6 was to empirically assess whether or not significant differences exist between the subgroup of biographical characteristics that acted as significant moderators between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance-related factors conceptualised as work

engagement, job satisfaction, organisational commitment and OCB as manifested in the sample of respondents.

The results indicated that the biographical variables of gender, age, educational level and tenure were significant moderators of the relationship between clarity, congruency of supervisor, supportability, transparency, discussability, caring, law and codes, independence, power sharing, ethical guidance, and role clarification, and dedication, absorption, affective, continuance and normative commitment, satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.

The results revealed significant differences with regard to gender and congruency of supervisor, law and codes, and power sharing. The results indicate that male participants scored higher on congruency of supervisor, law and codes and power sharing than their female counterparts. These results are in line with the research undertaken by Pierce et al. (2010), who found that there were significant differences with regard to ethical culture among males and females. The studies conducted on gender differences with regard to law and codes have provided contradictory results. Malloy et al. (2003) found that the perception of the law and code climate was higher for female than for males. This study contradicts the finding by Brown and Treviño (2010), who indicated that there were no significant differences with regard to ethical leadership and gender.

In terms of age, these results can be compared with those of Sower et al. (2005), conducted in the Israeli working environment, where the majority of the participants were 30 years of age, and displayed a higher level of ethical orientation. Research indicates that individuals tend to become more ethical and identify more with moral concepts as they grow older (Terpstra et al., 1993).

According to the findings of this study, educational level revealed significant differences with regard to ethical culture (clarity, congruency of supervisor, supportability, transparency and discussability), ethical climate (caring, law and codes, and independence) and ethical leadership (power sharing, ethical guidance and role clarification). Participants with an honours degree scored higher than those with matric, bachelor's, master's and doctorate degrees. These results can be compared with the research carried out by Sower et al. (2005), who found that respondents with a postgraduate educational level reported a higher level of ethical intensity.

Respondents with a postgraduate educational level perceived a more ethical tone at the management level than respondents without a postgraduate degree (Sower et al., 2005).

In terms of tenure, the results revealed significant differences with regard to ethical culture, ethical climate and ethical leadership. These findings can be compared with research by Afolabi and Omole (2011), where it was found that there were significant differences with regard to moral judgement and years of experience. Individuals in the later career stage were found to display a higher level of moral judgment than those in the early career stage (Afolabi et al., 2011).

Overall, previous research in terms of the ethical context and behaviour variables indicates that females tend to exhibit higher levels of ethical behaviour than males (Proios, Gianitsopoulou & Efreimidou, 2010). Research also demonstrates that individuals aged 30 and above tend to have a higher level of ethical culture, climate and ethical leadership (Jensen, 2001). The results further indicate that individuals with a long tenure tend to perceive their leaders as being ethical (Glover et al., 2002).

#### *7.4.8.2 Interpretation of the tests for significant mean differences results of the job retention and performance-related factors*

Table 7. 47, 7.48, 7.49, 7.50, 7.51, 7.52 and 7.53 (in appendix A) are of relevance to this section.

The results reveal significant differences between job satisfaction (satisfaction with work itself) and OCB (altruism) with regard to gender. Males scored higher on both satisfaction with work itself and altruistic citizenship behaviour. These findings did not compare with research by Miao and Shenn (2011) and Pavalache-Ilie (2014) who found that females tend to be more satisfied and involved in extra-role behaviour than males. The high scores of males on both satisfaction and altruism can be attributed to the fact that the research was conducted in a male-dominated work environment. According to Pavalache-Ilie (2014), in such a work environment, men tend to score higher than women and vice versa. The results further indicate that men tend to have a higher level of satisfaction with their working conditions, feedback and support, and helping behaviour in the organisation (Gumbang, Suki & Suki, 2010).

No significant differences among gender groups could be found between dedication, absorption, satisfaction with supervisor, and affective, continuance and normative commitment. These findings can be compared with research performed by Albdour and Altarawneh (2014), who found no significant differences between work engagement and commitment in terms of gender.

In terms of age, the results revealed significant differences with regard to the job retention and performance-related factors (dedication, absorption, and satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment). These findings can be compared with research reported by Schaufeli and Bakker (2003), who found that men scored significantly higher on vigour, dedication and absorption than women. Coetzee and Rothmann (2007) found that individuals between 26 and 40 years of age and older tend to score higher on work engagement. Research indicates that the age group of 50 years and older tend to have a higher score than younger age groups in terms of their level of organisational commitment (Odoch & Nangoli, 2013).

According to the findings, educational level revealed significant differences with regard to the job retention and performance-related factors (dedication, absorption, and satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment). These findings can be compared with the research carried out by Gilbert (2001) and Odoch et al. (2013), who established that highly qualified individuals tend to score higher on work engagement and commitment than individuals with a low level of qualification. Research indicates that individuals with a Master's degree tend to score higher on satisfaction with supervisor than those with 3 or 4 years of university education. Highly qualified employees tend to be satisfied with the support from their competent supervisor, and are resilient, enthusiastic and inspired, and concentrate on their job. This may increase their intention to stay with the organisation (Virk, 2012).

In terms of tenure, the results revealed significant differences with regard to the job retention and performance-related factors (dedication, absorption, and satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment). The results indicate that individuals with less than one year of tenure in the organisation scored higher on engagement, satisfaction and commitment. These findings can be compared with research by Avey, McKay and Wilson (2007), who determined that less experienced workers tend to follow specific norms in building their relationship with the organisation than more tenured

ones. Individuals who had between 5 and 10 years' experience, and more, were more satisfied than those with less experience (Virk, 2012).

#### **7.4.9 Decision regarding research hypotheses**

Overall, with the exception of research hypothesis Ha6, the study results provided support for the alternative hypotheses. Table 7.54 (in appendix A) summarises the decisions with regard to the research hypotheses.

### **7.5 CHAPTER SUMMARY**

This chapter reported on and interpreted the findings of the empirical investigation into the nature of the statistical interrelationships and overall relationships between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership as a composite set of independent variables) and the job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB as a composite set of dependent variables), as manifested in a sample of respondents in a typical railway work environment.

The following empirical research aims were achieved:

**Research aim 1:** To empirically assess the nature of the statistical interrelationships between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as manifested in a sample of respondents employed in the Railway organisation in the DRC.

**Research aim 2:** To empirically assess the nature of the overall statistical relationship between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership, as a composite set of independent latent variables and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as a composite set of dependent latent variables.

**Research aim 3:** To empirically assess whether or not the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership) positively and significantly predict the job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB).

**Research aim 4:** Based on the overall statistical relationship between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), to determine whether there are a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

**Research aim 5:** To empirically assess whether or not the biographical characteristics (gender, age, educational level and tenure) significantly moderate the relationship between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB.

**Research aim 6:** To empirically assess whether or not significant differences exist between the sub-groups of biographical characteristics that acted as significant moderators between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as manifested in the sample of respondents.

The general research aim was also achieved, namely to construct and test a model of the relationship between ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership and job retention and performance related-factors, conceptualised as work engagement, job satisfaction, organisational commitment and OCB), and biographical characteristics (measured as age, gender, educational level and job tenure).

Chapter 8 addresses empirical research aim 7, namely to formulate recommendations for retention and performance practices in the railway organisation, based on the findings of this

research. The chapter also presents the conclusions and limitations of the study, and offers recommendations for both practice and future research.

## **CHAPTER 8 CONCLUSIONS, LIMITATIONS, RECOMMENDATIONS**

The aim of this chapter is to discuss the conclusions and limitations of the study and to make recommendations for retention and performance practices in the work environment.

### **8.1 CONCLUSIONS**

The following conclusions were drawn regarding the literature review and the empirical investigation.

#### **8.1.1 Conclusions regarding the literature review**

The general aim of this study was to construct and test a model on the relationship between ethical context and behaviour variables, job retention and performance related-factors, and biographical characteristics.

Conclusions were drawn about each of the specific aims.

*First literature review aim:*

The first aim namely to *theoretically explore the ethical context and behaviour variables as consisting of ethical culture, ethical climate and ethical leadership and the variables that influence these constructs*, was achieved in chapters 2 ethical context and behaviour.

The following conclusions were drawn:

The ethical context and behaviour conceptualised as indicated may be regarded as organisational resources that could help to reduce or influence ethical conduct in an organisation (McCabe, Butterfield & Treviño, 2002). These organisational resources focus on fostering an ethical, positive and favourable working environment that is conducive to positive attitudes and behaviour (Parboteeah, Chen, Lin, Chen, Lee and Chung (2010). These ethical context and behaviour variables may also be regarded as those organisational contexts and resources that enhance a positive ethical work environment, where culture, climate and ethical leadership flourish (Duh, Belak & Milfelner, 2010). Ethical context and behaviour is perceived as

an organisation's ability to treat its members fairly by modelling the correct behaviour and teaching them to do the right thing. This implies encouraging them to do what is expected and meet the expectations of them (Guadamillas-Gómez, Donate & Manzamares, 2011).

Individuals who perceive their work environment to have a positive ethical context and behaviour (positive ethical culture, clear policies, procedures and ethical conduct and fair treatment from their ethical leaders) are more likely to behave accordingly by enacting ethical behaviour. If the ethical context and behaviour is perceived as negative, individuals are more likely to engage in unethical behaviour because of lack of enforcement, normative expectations, policies and role models amongst leaders in the organisation (Kaptein, 2011). Individuals who perceive their ethical context and behaviour as being characterised by clear ethical conduct, policies, procedures and positive and fair treatment are more likely to be ethical, and refrain from engaging in unethical behaviour. A work environment characterised by a positive ethical context and behaviour helps to enforce ethical norms, rules and codes, and plays a major role in the development of the context in which workers operate (Martin et al., 2006). A favourable working environment characterised by a positive ethical context and behaviour has been known to reduce unethical behaviour through leaders' role modelling, as it would appear that individuals learn positive or ethical behaviour more effectively when they observe the former's behaviour and its consequences (Ghazadi et al., 2013).

#### *Second literature review aim*

The second aim, namely to theoretically explore the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB and the variables that influence these constructs, was achieved in chapter 3.

The following conclusions were drawn:

The job retention and performance conceptualised as mentioned may be regarded as critical elements of an organisation's more general talent management, which is the implementation of integrated strategies designed to increase workplace productivity by improving processes for attracting, developing, retaining and utilising individuals with required skills and aptitudes to meet current and future business needs (Hausknecht, Rodda & Howard, 2009). Job retention

and performance factors are key elements that help an organisation in the development of human strength, fostering the vitality and flourishing of employees (Mendes & Stander, 2011). Individuals who perceive their organisation to devise sound and positive retention and performance strategies are likely to be satisfied, engaged, committed and engage in discretionary behaviour that contributes to the functioning of the organisation. If they perceive a lack of retention and performance strategies they will less likely to be satisfied, engaged, committed and less engaged in extra role behaviour (Soieb, Othman & D'Silva, 2013).

*Third literature review aim:*

The third aim, namely to explore the theoretical relationship between ethical context and behaviour variables and job retention and performance related-factors and biographical characteristics, was achieved in chapter 4.

The following conclusions were drawn:

Ethical context and behaviour related positively to job retention and performance (Young, 2012). A favourable working environment is characterised by a positive ethical culture, and aims to reduce turnover intention while increasing job retention and performance factors. If the ethical culture is perceived as positive, individuals are likely to be satisfied, engaged and committed, and to engage in extra-role behaviour that is beneficial to the organisation (Valentine et al., 2011). Conversely, if the ethical culture is perceived as negative, individuals are less likely to be satisfied, engaged, and psychologically and emotionally attached to the organisation, and are less likely to engage in discretionary behaviours (Ruiz-Palomino et al., 2013).

Individuals who perceive their ethical work climate as being characterised by clear policies, procedures and ethical conduct are more likely to be satisfied, engaged and committed to the organisation, and to perform better in their tasks (Lu & Lin, 2014). An ethical climate helps to enforce ethical norms, rules and codes, and plays a major role in the development of the context in which workers operate (Martin et al., 2006). This ethical context also provides an interpretive framework for the organisation and affects the work experiences of workers, which ultimately affects their levels of job satisfaction, engagement, commitment and citizenship behaviours (Valentine et al., 2011). An ethical climate that fosters ethical norms, policies and procedures and promotes best practices can enhance employees' positive feelings towards

their jobs and emotional attachment to the organisation, and motivate them to engage in extra-role behaviour that contributes to the functioning of the organisation (Shin, 2011).

A leader who is a role model contributes to lowering turnover intention and increases employees' job satisfaction, engagement, commitment and performance (Den Hartog et al., 2012). Individuals who perceive their ethical leader as a role model are likely to be satisfied, engaged and psychologically and emotionally attached to the organisation, and to show higher levels of citizenship behaviour (Ponnu et al., 2009). Such a leader helps to reduce unethical behaviour when it occurs, as well as influencing employees' attitudes and behaviour (Treviño et al., 2010).

*Fourth literature review aim:*

The fourth aim, namely to construct a theoretical model on the relationship between ethical context and behaviour variables, job retention and performance related-factors and biographical characteristics, was achieved in chapter 5 by constructing a theoretical model.

The following conclusions were drawn:

- It is important that the implications of the theoretical model for the relationship between ethical context and behaviour and job retention and performance and biographical characteristics for employees are not ignored, as an understanding of an individual's perception of a positive, ethical and favourable working environment, and of fair treatment, may inform job retention and performance-related practices, which are viewed as key elements or factors that are intended to enhance the retention and performance of employees (Valentine, Godkin, Fleischman & Kidwell, 2011).
- Failing to address the retention and performance of employees may result in an organisation incurring costs because of the high employee turnover rates and low level of performance. These, in turn, may lead the organisation to incur increased costs for the staffing, recruitment and training of highly skilled workers (Coetzee et al., 2014).

- Biographical characteristics (age, gender, educational level and job tenure) may also influence or improve one's ability to perceive his or her working environment as being ethical and applying relevant ethical standards. These in turn, may lead one to a higher level of satisfaction, engagement, psychological attachment and engagement in extra-role activities that are of benefit to the organisation.

Organisations may benefit from ethical context and behaviour practices that increase employees' intention to stay and reduce turnover costs, while enhancing performance and productivity (Valentine et al, 2011).

### **8.1.2 Conclusions regarding the empirical study**

*First empirical aim: To empirically assess the nature of the statistical interrelationships between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as manifested in a sample of respondents employed in the Railway organisation in DRC.*

The empirical results provided support for research hypothesis Ha1. The following overall conclusions were drawn:

- Participants who perceive their favourable working environment as being positive are able to view normative expectations such as values, norms, rules and regulations as concrete, comprehensive and understandable. They are also able to observe their management as respecting them and acting according to the codes of conduct, as well as supporting them, being transparent and allowing them to disclose unethical behaviour.
- Participants who perceive their working environment as ethical (high ethical climate) are aware of the correct behaviour and know how ethical situations should be handled within the organisation.
- A positive perception of ethical climate indicates the presence of organisational values, practices and procedures that pertain to moral behaviour and attitudes.

- Participants who perceive their favourable work environment as being positive and ethical (high ethical culture) regard their ethical leaders as role models who listen, involve them in ethical decision-making processes, clarify their responsibilities, and set priorities in terms of the ethical dilemmas that they encounter.
- Individuals who perceive positive ethical conduct, policies, procedures and practices (ethical climate) in their organisation describe their leaders as being ethical, treating them with fairness, listening, and clarifying their roles and expectations.
- A high score on ethical leadership indicates that leaders operate with an internal sense of duty and have the desire to do the right thing for the greater good. They are in turn recognised as ethical leaders whom other employees would like to emulate (Philipp et al., 2013).
- Individuals who scored high on work engagement are able and willing to invest effort in their work, are enthusiastic, passionate and proud with regard to it, and are happily engrossed in it.
- Individuals who have a high level of energy are able to prosper despite adverse conditions.
- Individuals who scored high on job satisfaction are content with the rewards system, and their working relationships, satisfied with their supervisor, and happy with their working conditions in general.
- Individuals who scored high on organisational commitment are able to identify with the organisation, and are psychologically and emotionally attached to it.
- A high level of OCB is regarded as contextual performance. Participants in the organisation see themselves as going the extra mile in their tasks.
- Ethical culture increases employees' level of satisfaction and emotional attachment to the organisation, as well as their level of citizenship behaviour.

- A high ethical climate may increase employees' satisfaction and psychological and emotional attachment to the organisation, and this may in turn lead to higher levels of productivity and performance.
- A high level of ethical leadership may increase employees' level of satisfaction, engagement, commitment and discretionary behaviour, which may in turn lead to lower turnover intention.

*Conclusion: The ethical context and behaviour conceptualised as noted are significantly related to the job retention and performance conceptualised earlier.*

*Second empirical aim: To empirically assess nature of the overall statistical relationship between the ethical context and behaviour variables, conceptualised as ethical culture, ethical climate and ethical leadership, as a composite set of independent latent variables and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as a composite set of dependent latent variables.*

The empirical results provided support for research hypothesis Ha2. The following overall conclusions were drawn:

- A positive perception of a favourable working environment (positive ethical culture) implies that individuals regard their organisation as having developed well-structured and clear codes of conduct, as well as a board and middle management that respect and act according to the codes of conduct. They also view their organisation as providing support in order to meet normative expectations of ethics and allowing them to disclose or report wrongdoings. This in turn leads to a higher level of employee job satisfaction, engagement, and commitment and citizenship behaviour.
- Individuals' perception of their working environment as reflecting organisational procedures, policies and practices, with moral consequences, results in positive employee attitudes and behaviour. A positive perception of a caring climate indicates that individuals believe that decisions are and should be based on an overarching concern for the wellbeing of others. They also adhere to the codes and regulations of their profession and believe that they should act in accordance with

their moral convictions when making ethical decisions. This in turn may increase the level of employee satisfaction, engagement, commitment and citizenship behaviour.

- A positive perception of ethical leadership implies that individuals appreciate their role model, leader, as listening to and involving them in ethical decision making processes, guiding them ethically and clarifying their responsibilities and expectations. This in turn may enhance performance and lower turnover intentions.

*Conclusion: The ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) of individuals are significantly and positively related to their job retention and performance-related factors.*

*Third empirical aim: To empirically assess whether or not the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership positively and significantly predict the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB.*

The empirical results provided support for research hypothesis Ha3. The following overall conclusions were drawn:

- Ethical culture plays an important role in explaining employees' level of engagement. Individuals who perceive their work environment as being favourable (positive ethical culture) will be able to influence their level of engagement, and this in turn may improve the retention of employees.
- Ethical culture is important in explaining employees' job satisfaction. Individuals who perceive their workplace as being positive from an ethical point of view tend to be satisfied with the rewards system, their competent supervisor, positive atmosphere, promotional opportunities and overall work conditions.
- Ethical culture is important in explaining employees' organisational commitment. Individuals who perceive their organisational ethical culture as positive tend to be psychologically and emotionally attached to the organisation, and sometimes stay with the organisation for a long period of time.

- Ethical culture plays an important role in explaining OCB. If an organisation's culture is perceived as ethical, individuals will tend to engage in discretionary behaviour that is crucial for the functioning of the organisation.
- Ethical climate plays an important role in explaining work engagement and job satisfaction. Individuals who perceive their work environment to have devised positive policies, procedures and practices tend to be satisfied with and engaged in their work.
- Ethical climate is also important in explaining employees' organisational commitment and citizenship behaviour. Individuals who perceive their organisation as setting clear codes of conduct, norms and regulations tend to display a sense of emotional attachment to the organisation and engage in extra-role behaviour.
- Ethical leadership plays an important role in explaining employees' level of engagement and commitment. Individuals who perceive their ethical leaders as communicating with them, listening to them, involving them in ethical decisions, clarifying their responsibilities, acting in accordance with their words, and treating others fairly tend to trust their leaders. They also tend to be more engaged in and psychologically and emotionally attached to the organisation.
- Ethical leadership is also important in explaining job satisfaction and OCB. Individuals who perceive their role model leaders as treating them with fairness and integrity, listening to them, and involving them in ethical decisions tend to be satisfied with their working conditions and engage in discretionary behaviour.

*Conclusion: The ethical context and behaviour variables of individuals positively and significantly predict their job retention and performance-related factors.*

*Fourth empirical aim: Based on the overall statistical relationship between the ethical context and behaviour variables, (conceptualised as ethical culture, ethical climate and ethical leadership) and the job retention and performance related-factors, (conceptualised as work engagement, job satisfaction, organisational commitment and OCB), to assess whether there a*

*good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.*

The empirical results provided support for research hypothesis Ha4. The following overall conclusions were drawn:

- Retention and performance practices may be influenced by the ethical context and behaviour variable of ethical culture (clarity, congruency of supervisor, supportability, transparency and discussability).
- Retention and performance practices may be influenced by the ethical context and behaviour variable of ethical climate (caring, law and codes, and independence).
- Retention and performance practices may be influenced by the ethical behaviour variable of ethical leadership (power sharing, ethical guidance and role clarification).
- Retention and performance practices may be influenced by the job retention and performance-related factors of work engagement (dedication and absorption), job satisfaction (satisfaction with supervisor and satisfaction with work itself), organisational commitment (affective commitment, continuance commitment and normative commitment), and OCB (sportsmanship, courtesy and altruism).

*Conclusion: The ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership of individuals and their job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB constitute a model that may be used to inform retention and performance practices. The model includes elements of ethical context and behaviour that must be considered in the design of retention and performance practices.*

*Fifth empirical aim: To empirically assess whether or not the biographical characteristics (age, gender, educational level and tenure) significantly moderate the relationship the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB.*

The empirical results provided support for research Ha5. The following overall conclusions were drawn:

(a) Conclusions regarding differences in terms of educational level:

Educational level significantly moderates the relationship between the ethical context and behaviour variables and the job retention and performance-related factors.

- Educational level may influence individuals' perception of clarity. Those who have a lower educational level ( $\leq 4$  undergraduate) tend to perceive their organisation as having well-structured and understandable codes of conduct. They are dedicated, happily absorbed, committed to the organisation, satisfied and engage in extra-role behaviour, in comparison to individuals with postgraduate qualifications ( $\geq 5$  postgraduate).
- Educational level may influence individuals' perception of the congruency of the supervisor. Individuals who have a lower educational level ( $\leq 4$  undergraduate), tend to perceive their management to act in accordance with ethical expectations and are enthusiastic, deeply absorbed, emotionally attached to the organisation, satisfied and engage in discretionary behaviour, in comparison to those with a higher educational level ( $\geq 5$  postgraduate).
- Individuals' educational level may influence their perception of supportability. Those who have a lower educational level ( $\leq 4$  undergraduate) tend to perceive their organisation to provide support for them, in order to meet the normative expectations, and are proud, concentrate on their work, are emotionally attached to the organisation, satisfied and perform better in their tasks than individuals with a higher educational level ( $\geq 5$  postgraduate).
- Educational level may influence individuals' perception of transparency. Those with a lower educational level ( $\leq 4$  undergraduate) tend to perceive their organisation as portraying a high level of visibility concerning ethical expectations, and are engaged, committed, satisfied and engage in citizenship behaviour, in comparison to individuals with a higher educational level ( $\geq 5$  postgraduate).

- Educational level may also influence individuals' perception of discussability. Individuals with a lower educational level ( $\leq 4$  undergraduate), tend to perceive their organisation to provide them with the opportunity to discuss ethical issues, and are enthusiastic, proud and deeply engrossed in their work, as well as being satisfied, committed and engaging in extra-role behaviour that contributes to the functioning of the organisation, in comparison to individuals with a higher educational level ( $\geq 5$  postgraduate).
- Educational level may influence individuals' perception of caring, law and codes and independence. Individuals with a low educational level ( $\leq 4$  undergraduate) tend to perceive that decisions are and should be based on an overarching concern for the wellbeing of others. They adhere to the codes and regulations of their profession, and believe that they should act in accordance with their personal moral convictions. In addition, they are engaged, committed, satisfied and engage in extra-role behaviour, in comparison to individuals with a higher educational level ( $\geq 5$  postgraduate).
- Individuals' educational level may influence their perception of power sharing, ethical guidance and role clarification. Individuals who have a lower educational level ( $\leq 4$  undergraduate) tend to perceive their ethical leaders as involving them in the ethical decision making process, guiding them in establishing priorities, and clarifying their responsibilities and expectations. These individuals are enthusiastic, happily engrossed in their work, committed to the organisation, satisfied with their work conditions, and engage in extra-role behaviour, in comparison to individuals with a higher educational level ( $\geq 5$  postgraduate).

(b) Conclusions regarding differences in terms of tenure:

Tenure significantly moderates the relationship between the ethical context and behaviour variables and the job retention and performance-related factors.

- Tenure may influence individuals' clarity. Individuals with a short tenure ( $\leq 5$  years) tend to perceive their working environment as supporting ethical standards, are enthusiastic, deeply absorbed, and show citizenship behaviour, in comparison to individuals with a longer tenure ( $\geq 5$  years).

- Individuals' tenure may influence their perception of congruency of supervisor. Those with a short tenure ( $\leq 5$  years) tend to perceive their management as setting clear normative expectations, in order to ensure compliance, and are enthusiastic, happily absorbed, and engage in discretionary behaviour that is beneficial to the organisation, in comparison to individuals with a longer tenure ( $\geq 5$  years).
- Individuals' tenure may influence their perception of supportability. Those with a short tenure ( $\leq 5$  years) tend to perceive their organisation as encouraging them to comply with ethical standards, and are proud, deeply absorbed in their work, and engage in discretionary behaviour that is beneficial to the organisation, in comparison to individuals with a high tenure ( $\geq 5$  years).

With regard to the above findings, it may be concluded that for the purpose of retention and performance practices, it is crucial that organisations take into consideration the biographical variables of gender, age, educational level and tenure, because these variables significantly moderate the relationship between the participants' ethical context and behaviour variables and their job retention and performance-related factors.

*Sixth empirical aim: To empirically assess whether or not significant differences exist between the biographical characteristics that act as significant moderators between the ethical context and behaviour variables conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance related-factors conceptualised as work engagement, job satisfaction, organisational commitment and OCB, as manifested in the sample of respondents.*

The empirical results provided support for research hypothesis Ha6. The following overall conclusions were drawn:

(a) Gender

Significant differences exist between gender and ethical context and behaviour variables and job retention and performance-related factors.

- *Gender and congruency of supervisor.* In terms of the biographical variable of gender, the empirical analysis indicated that gender differences contributed to

differences in the scores for congruency of supervisor. The results indicated that, to a greater extent than their female counterparts, male respondents perceived their organisation to have a clear ethical code of conduct that is understandable.

- *Gender and law and code.* The results indicated that to a greater extent than their female counterparts the male participants perceived their organisation as enforcing respect for rules, norms and law.
- *Gender and power sharing.* The results indicated that the male participants are more enthusiastic, proud or dedicated than their female counterparts.
- *Gender and satisfaction with work itself.* The results indicated that the male participants were more satisfied with their working conditions than their female counterparts.
- *Gender and altruism.* The results indicated that the male participants perceived their organisation to portray more helping behaviour than their female counterparts.

(b) Age

Significant differences exist between age and ethical context and behaviour variables and job retention and performance-related factors.

- *Age and clarity.* In terms of the biographical variable of age, the results indicated that age differences contributed to differences in the scores on clarity. Participants between 31 and 55 years of age perceived the organisation to possess clear ethical codes of conduct, to a greater extent than the other age groups.
- *Age and congruency of supervisor.* The results indicated that participants aged 56 and older perceived the board and management to act in accordance with ethical expectations to a greater extent than the other age groups.
- *Age and supportability.* The result indicated that the participants between the ages of 31 and 55 years perceived their organisation to provide support for them in order to meet normative expectations to a greater extent than the other age groups.

- *Age and transparency.* The results indicated that participants aged 56 and older perceived their organisation to show a high level of visibility to a greater extent than other age groups.
- *Age and discussability.* The results indicated that participants aged 56 and older perceived their organisation to provide opportunities to discuss ethical issues to a greater extent than other age groups.
- *Age and caring.* In terms of the biographical variable of age, the results indicated that age differences contributed to differences in the scores for caring. The results indicated that participants aged 56 and older believed that decisions are and should be based on an overarching concern for the wellbeing of others to a greater extent than other age groups.
- *Age and law and codes.* The results indicated that participants aged 56 and older perceived their organisation to enforce codes of conduct and rules to a greater extent than other age groups.
- *Age and independence.* The results indicated that, to a greater extent than other age groups, participants aged 56 and older believed that they should act in accordance with their personal convictions when making ethical decisions.
- *Age and power sharing and role clarification.* In terms of the biographical variable of age, the results indicated that age differences contributed to differences in the scores for power sharing and role clarification. The results indicated that participants aged 56 and older perceived their ethical leaders as involving them in the decision making process and clarifying their responsibilities and expectations to a greater extent than other age groups.
- *Age and ethical guidance.* The results indicated that participants between the ages of 31 and 55 perceived their ethical leaders as guiding them in setting priorities and in the ethical dilemmas that they encountered to a greater extent than other age groups.

- *Age and dedication and absorption, affective, continuance and normative commitment.* The results indicated that, to a greater extent than other age groups, participants between the ages of 31 and 55 are more enthusiastic, proud and happily concentrate on their work, and are psychologically and emotional attached to the organisation.
- *Age and satisfaction with supervisor, satisfaction with work itself, sportsmanship, courtesy and altruism.* The results indicated that participants between the ages of 31 and 55 are more satisfied with their competent supervisor and the work conditions, and are more engaged in discretionary behaviour than other age groups.

(c) Educational level

Significant differences exist between the educational level and ethical context and behaviour variables and the job retention and performance-related factors.

- *Educational level and clarity.* In terms of the biographical variable of educational level, the results indicated that differences in this respect contributed to differences in the scores for clarity. The results indicated that participants with an honours degree perceived that their organisation had clear ethical codes of conduct that were comprehensible to a greater extent than participants at other educational levels.
- *Educational level and congruence of supervisor, supportability, transparency and discussability.* The results indicated that participants with a Master's degree perceived their board and middle management to act in accordance with ethical expectations, demonstrate visibility, support them in ethical decisions and allow them to disclose wrongdoings to a greater extent than other educational levels.
- *Educational level and caring, law and codes and independence.* The results indicated that, to a greater extent than those with other educational levels, participants with a Master's degree perceived ethical concern to exist in the

organisation, adhered to the codes and regulations, and felt that their personal moral convictions were taken into consideration when making ethical decisions.

- *Educational level and power sharing and role clarification.* The results indicated that participants with a Master's degree perceived their ethical leaders as involving them in the decision-making process, listening to their ideas and clarifying their responsibilities and expectations to a greater extent than those at other educational levels.
- *Educational level and ethical guidance.* The results indicated that to a greater extent than those with other educational levels, participants with an honours degree perceived their ethical leaders as guiding them in setting priorities concerning ethical issues.
- *Educational level and dedication and absorption.* The results indicated that participants with an honours degree were more enthusiastic and deeply absorbed than those at other educational levels.
- *Educational level and satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment and sportsmanship, courtesy and altruism.* The results indicated that participants with a Master's degree were more satisfied and committed to the organisation, and engaged more in extra-role behaviour that contributed to the functioning of the organisation, than those at other educational levels.

(d) Tenure

Significant differences exist between tenure and the ethical context and behaviour variables and the job retention and performance-related factors.

- *Tenure and clarity, congruency of supervisor, supportability, transparency and discussability.* In terms of the biographical variable of tenure, the result indicated that tenure differences contributed to differences in the scores for clarity, congruency of supervisor, supportability, transparency and discussability. The

results indicated that, to a greater extent than other tenure groups, participants with between 16 and 20 years of tenure perceived their organisation to have clear ethical codes of conduct that are comprehensible, and their board and middle management to be acting in accordance with ethical expectations, as well as support and visibility, and encouragement of employees to disclose unethical behaviour.

- *Tenure and caring.* In terms of the biographical variable of tenure, the results indicated that tenure differences contributed to differences in the scores for caring. The results indicated that participants with between 11 and 15 years of tenure perceived ethical concerns to exist for others to a greater extent than other tenure groups.
- *Tenure and law and codes.* In terms of the biographical variable of tenure, the results indicated that tenure differences contributed to differences in the scores for law and codes. The results indicated that participants with between 16 and 20 years of tenure adhered more to the codes and regulations of their profession or authority than other tenure groups.
- *Tenure and independence.* In terms of the biographical variable of tenure, the results indicated that tenure differences contributed to differences in the scores for independence. The results indicated that, to a greater extent than other tenure groups, participants with between 11 and 15 years of tenure believed that their personal moral convictions were taken into consideration when making ethical decisions.
- *Tenure and power sharing, ethical guidance and role clarification.* In terms of the biographical variable of tenure, the results indicated that tenure differences contributed to differences in the scores for power sharing, ethical guidance and role clarification. The results indicated that, to a greater extent than other tenure groups, participants with between 16 and 20 years of tenure perceived their ethical leaders as involving them in the decision-making process, helping them to set priorities concerning ethical issues, and clarifying their performance goals and ethical expectations.

- *Tenure and dedication, absorption, satisfaction with supervisor, affective, continuance and normative commitment, sportsmanship and courtesy.* In terms of the biographical variable of tenure, the results indicated that tenure differences contributed to differences in the scores for dedication, absorption, satisfaction with supervisor, affective, continuance and normative commitment, sportsmanship and courtesy. The results indicated that participants with between 16 and 20 years of tenure were more satisfied with their competent supervisor, and were more enthusiastic, concentrated more on their work, as well as being more emotionally attached to the organisation and engaging more in extra-role behaviour than other tenure groups.
- *Tenure and satisfaction with work itself and altruism.* In terms of the biographical variable of tenure, the results indicated that tenure differences contributed to differences in the scores for satisfaction with work itself and altruism. The results indicated that participants with between 11 and 15 years of tenure were more satisfied than other tenure groups with their working conditions and were more engaged in helping behaviour.

Conclusion: Significant differences existed between gender, age, educational level and tenure with regard to the ethical context and behaviour variables (clarity, congruency of supervisor, supportability, transparency and discussability; caring, law and codes and independence; power sharing, ethical guidance and role clarification) and the job retention and performance-related factors (dedication, absorption, satisfaction with supervisor, satisfaction with work itself; affective, continuance and normative commitment; and sportsmanship, courtesy and altruism).

### **8.1.3 Conclusions regarding the central hypothesis**

The constructed and tested model explains the relationship between ethical context and behaviour variables, job retention and performance related-factors and biographical variable characteristics (measured as age, gender, educational level and job tenure). The empirical study provided statistically significant support for the central hypothesis. The hypothesis is therefore accepted.

#### **8.1.4 Conclusions regarding the contribution of the study to the field of organisational psychology**

Conclusions were drawn in terms of the literature review, empirical study and employees' retention and performance practices.

##### *8.1.4.1 Conclusions in terms of the literature review*

The findings of the literature review add value to the field of industrial and organisational psychology, particularly with regard to the retention and performance practices of an organisation. The literature review provided new insight into the relationship between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and the retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB). The literature review contributed a new understanding by providing relevant information on organisational ethics practices. Furthermore, the study added significant value to the existing literature through its insight into the ways in which the ethical context and behaviour variables (ethical culture, ethical climate, and ethical leadership) and the retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB) are related. Based on the literature review, an ethical context and behaviour model was constructed.

##### *8.1.4.2 Conclusions in terms of the empirical study*

The observed statistical relationships between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and the job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB) provided new understanding in terms of the ethical context and behaviour model for employees in an organisation.

The correlational analyses revealed that, individuals' perceptions of ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) are significantly related to their job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB). This means that organisational resources

relating to the ethical context and behaviour variables of individuals and their job retention and performance-related factors should be considered in the development of an ethical context and behaviour model for retention and performance practices.

The canonical correlations confirmed the overall relationship between the ethical context and behaviour variables and the job retention and performance-related factors, and identified the variables that affected the overall relationship. The multiple linear regression analysis helped to identify the ethical context and behaviour variables that acted as significant predictors of individuals' job retention and performance-related factors.

Moreover, the structural equation modelling analysis assisted in the construction of an empirically tested ethical context and behaviour model, which may be used in the development of retention and performance practice strategies. The structural model (the empirically tested ethical context and behaviour model) emphasised the fact that the ethical culture variables of (clarity, congruency of supervisor, supportability, transparency, discussability; ethical climate (caring, law and codes and independence); ethical leadership (power sharing, ethical guidance and role clarification), and work engagement (dedication and absorption), Job satisfaction (satisfaction with supervisor, satisfaction with work itself), organisational commitment (affective, continuance and normative commitment) and OCB (sportsmanship, courtesy and altruism) should be considered in retention and performance practice strategies. Furthermore, the moderated hierarchical regression analyses and tests for significant mean differences helped to incorporate a person-centred approach into retention and performance practice strategies, thereby complementing the ethical context and behaviour variables which had been taken into consideration in the correlational and inferential (multivariate) statistical analyses. The statistical analyses helped the researcher to detect the core variables (clarity, congruency of supervisor, supportability, transparency, discussability; caring, law and codes and independence; power sharing, ethical guidance and role clarification; and dedication, absorption, satisfaction with supervisor, satisfaction with work itself, affective, continuance and normative commitment; sportsmanship, courtesy and altruism) and biographical characteristics of the sample (gender, age, educational level and tenure) that are pertinent to retention and performance practice strategies.

#### 8.1.4.3 *Conclusions regarding the field of organisational retention and performance practices*

With regard to the ethical context and behaviour variables and the job retention and performance-related factors, both the literature review and empirical results have contributed new knowledge to the field of industrial and organisational psychology, particularly in terms of the development of an ethical context and behaviour model and the design of retention and performance practices in an organisation in the DRC.

The literature review provided positive insights into individuals' perception of a positive and favourable working environment. The relationship between the ethical context and behaviour variables and the job retention and performance-related factors provided new knowledge regarding the retention and performance of employees in an organisation. This new knowledge or understanding can be utilised to develop retention and performance practice strategies for such a working environment.

In light of the literature review, the following conclusion was drawn: Industrial psychologists and human resource practitioners should take the theoretical models of ethical context and behaviour (conceptualised as noted), and job retention and performance (conceptualised earlier) into account when designing retention and performance practices for employees. Since gender, age, educational level and tenure moderated the relationship between the ethical context and behaviour variables and the job retention and performance-related factors, theoretical models should also be considered in this regard.

The results of the empirical study provided new knowledge about the relationship between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and the job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB). This new knowledge suggests that it would be wise for employee retention and performance practices to take the effect of organisational resources such as culture, climate and leadership into account, as these may influence the turnover intention of employees. In addition, an individual working in a favourable and positive working environment is more likely to be satisfied, engaged, emotionally committed to the organisation, and to perform better in his or her tasks.

It is advisable that organisations reduce the turnover intention and increase performance by encouraging employees to be engaged, satisfied, committed and engaged in citizenship behaviour, by creating a positive and favourable working environment where ethical codes of conduct, policies, regulations, practices, policies exist and ethical leaders act as role models (Coetzee et al., 2014; Kalshoven et al., 2011).

It is essential that an organisation understand the importance of creating a positive and favourable working environment which is characterised by a positive ethical culture and climate, and where leaders act as role models, especially in an organisation in the DRC. Furthermore, it is important that leader help employees to abide by structured codes of conduct, rules and regulations, which are required for an ethical work environment, and which may in turn affect these employees' attitudes and behaviour (Martin et al., 2006).

More specifically, it is recommended, for employee retention and performance practices purposes, that organisations develop both the ethical context and behaviour variables and the job retention and performance-related factors which are underlined in the findings of this study as the organisational resources that increase an employee's retention and performance. Coetzee et al. (2014) pointed out that organisational resources such as culture, climate and leadership may enhance employees' attitudes, psychological and emotional attachment to the organisation, and performance. Moreover, organisations should emphasise their strengths and needs, specifically taking the biographical profile of their workers into consideration in terms of the moderating effects of gender, age, educational level and tenure, which were highlighted in the findings of this study.

## **8.2 LIMITATIONS OF THE STUDY**

The limitations of the study concerning both the literature review and the empirical study are discussed below.

### **8.2.1 Limitations of the literature review**

The literature review of this study was limited to Kaptein's (2008) Corporate Ethical Virtue (CEV), Victor and Cullen's (1988) Ethical Climate Questionnaire (ECQ), Kalshoven's (2011) Ethical Leadership Work Questionnaire (ELWQ), Schaufeli's et al's (2003) Utrecht Work

Engagement Scale (UWES), Lock (1969), Vitell et al (1991) and Smith, Kendall and Hulin's (1969) Job Satisfaction Questionnaire (JSQ), Meyer and Allen's (1997) Organisational Commitment Scale (OCS), and Organ's (1988) OCB Questionnaire (OCBQ). Additional models and paradigms were mentioned but not considered in this study, due to the methodological and paradigmatic boundaries.

There has been limited research conducted on the relationship between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and the job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB), especially in the context of the DRC's organisational retention and performance practices. Hence there was a paucity of DRC-related literature.

### **8.2.2 Limitations of the empirical study**

The main limitation of the empirical study was that large samples from various organisations with more representatives in terms of gender, age, educational level and tenure would have been desirable. The study was limited to predominantly male employees permanently employed in an organisation in the DRC. Therefore, one cannot generalise the findings to other genders, age groups, educational levels and tenures in occupational contexts. Furthermore, the mix of the different biographical information of the sample may have had an effect on the observed results. It is therefore recommended that a correctly representative study be investigated in the future.

In spite of the sample size of 839, this was not considered to be large enough to determine whether or not there is a definite, widespread, relationship between ethical culture, ethical climate, ethical leadership, work engagement, job satisfaction, organisational commitment and OCB. Therefore, the study cannot be generalised.

Another limitation pertaining to the study is that it was cross-sectional in nature. Therefore, it was not possible to confirm the causal relationships between the constructs. Future studies on the relationship between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and the job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB) should consider obtaining larger samples from more diverse organisations, as well as in terms of gender, age, educational

level and tenure in the DRC, in order to increase the generalisability of the research findings. Longitudinal studies should also be conducted in order to determine whether or not there is an association between the constructs over time.

Another limitation of this study was the issue of translation and back-translation of the seven instruments from English to French. Despite being simple questionnaires, their literal translation into French may not translate the exact meaning of the original questionnaires in English. Therefore, it is recommended that researchers should seek, whenever possible, to maintain the semantic, idiomatic and conceptual form of such instruments, without losing the original (Beaton, Bombardier, Guillermin & Ferraz, 2000).

Another limitation of this study was the use of self-report measures as data collection tools for the three antecedents (ethical culture, ethical climate and ethical leadership). A certain amount of social desirability, impression management and random responding are expected in self-report measures (Du Plooy & Roodt, 2010).

Despite the above mentioned limitations, it may be concluded that the study provides evidence and offers promise for future researchers in terms of the relationship between the variables that influence organisational retention and performance practices in the DRC's organisational context. It is important to consider the significance of a favourable and positive working environment and organisational resources, as well as the fact that there are more females and younger people with a low level of educational level and less experience entering the workforce. Findings such as the fact that the above categories of employees perceive their working environment as favourable and positive while the male employees, and those who are older, with a high educational level and more experience, perceive their work environment as less ethical suggest that this might lower their level of job retention and performance factors (satisfaction, engagement, commitment and citizenship behaviour or productivity). This will, hopefully, motivate future researchers' initiatives. Such initiatives may confidently introduce new retention and performance practices that will help the latter categories of employees to be more satisfied and psychologically and emotionally attached to the organisation, as well as to perform better in their tasks.

### **8.3 ETHICAL CONSIDERATIONS**

The ethical rules, regulations and procedures of the research institution were adhered to. The permission to conduct the research was also obtained from the management of the organisation as well as the ethics committee at the University of South Africa (UNISA).

### **8.4 RECOMMENDATIONS**

Based on the findings, conclusions and the limitations of this study, the following recommendations for industrial and organisational psychology, as well as for further research, are suggested.

#### **8.4.1 Recommendations for the field of industrial and organisational psychology retention and performance practices**

The central aim was described earlier.

Although the findings provided a valuable understanding in terms of the research aims, it is important to determine the specific interventions needed to address and develop a positive perception of ethical context and behaviour by individuals, so that their engagement, satisfaction, commitment and citizenship behaviour can be encouraged.

A working environment that is perceived as positive, favourable or ethical, and is characterised by well-defined policies, regulations and practices, where leaders act with respect and fairness, may lead to the development of high levels of employee satisfaction with their supervisors and working conditions. Such a working environment may also motivate employees to be more enthusiastic, proud, happily engrossed in their work, emotionally attached to the organisation, and to engage in citizenship behaviour that contributes to the functioning of the organisation. Ethical context and behaviour have been shown to be positively related to employees' level of engagement, job satisfaction, organisational commitment and OCB (Kalshoven et al., 2011).

It is thus recommended that the management support systems, for retention and performance purposes, should ensure that there is a positive and favourable working environment where role model leaders act in an ethical manner, show respect for employees and adhere to the ethical

codes of conduct. This will help to enhance employees' levels of satisfaction, engagement, commitment and citizenship behaviour.

Employee retention and performance may be influenced by clarity, congruency of supervisor, supportability, transparency and discussability. Therefore, organisations should create a positive work environment that is characterised by well-structured ethical codes, where the executive management act according to ethical expectations, support employees in ethical issues, demonstrate visibility and also establish a workplace where employees feel free to disclose any wrongdoings.

Employee retention and performance practices may also be influenced by climates which accentuate caring, law and codes and independence. Organisations should therefore create a healthy atmosphere in the working environment that is characterised by clear policies, regulations and practices, where employees adhere to the codes of their profession and feel that their personal moral convictions are taken into consideration when making ethical decisions.

Furthermore, employee retention and performance may be influenced by power sharing, ethical guidance and role clarification, as dimensions of ethical leadership. Therefore, organisations should develop a working environment where leaders communicate positively with their subordinates, involving them in the decision-making process, guiding them in terms of setting priorities concerning ethical issues, and clarifying their performance goals.

It is recommended that for more effective employee retention and performance practices, organisations should provide jobs that satisfy employees and encourage high levels of dedication and concentration. The organisation should also develop commitment strategies and encourage high levels of citizenship behaviour.

Lastly, it is recommended that organisations create positive work environments that encourage and support innovation and creativity.

#### **8.4.2 Recommendations for future studies**

The findings of this study showed a need for further research in exploring the relationship between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) of individuals and their job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB). It is recommended that further research addresses the limitations inherent to this study. The study was limited to a single organisation, and other studies of this nature should therefore be conducted using a representative sample from various genders, age groups, educational levels and tenures, and focusing on diverse organisations.

This study was cross-sectional in nature, and it was therefore not possible to ascertain the causal relationships of the relations between the variables under investigation. Longitudinal studies would thus be appropriate to determine the influence of the variables tested in this study on retention and performance practices within organisations.

It is recommended that further studies make use of different methodologies, both qualitative and quantitative, which could provide a fuller understanding of the relationship between the ethical context and behaviour variables and the job retention and performance-related factors. Ethical leadership should be used as a moderator variable in an investigation of the relationships between the ethical context and behaviour variables and the job retention and performance-related factors.

### **8.5 EVALUATION OF THE RESEARCH**

This study contributed at three levels to the field of industrial and organisational psychology, namely theoretical, empirical and practical levels.

#### **8.5.1 Contribution at a theoretical level**

The findings of this study have provided a new understanding of how individuals' ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) are related to their job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB). The literature review highlighted the importance of

considering these constructs in the design of retention and performance practice strategies. The approach followed by this study was original, as it integrated all these constructs in order to develop an ethical context and behaviour model for employees in an organisation.

Industrial and organisational psychologists should therefore be in a better position to assist organisations in understanding the relationship between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and the job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB), through human resource practitioners and managers involved with employee retention and performance practices.

It is recommended that these findings, especially the theoretical ethical context and behaviour model and its key behavioural aspects, be used for employee retention and performance practices in an organisational context in the DRC.

### **8.5.2 Contribution at an empirical level**

The findings of this study contributed to the development of an empirically tested ethical context and behaviour model that may be used to inform retention and performance practices for employees in an organisational context in the DRC. The proposed model is a new contribution to the field of organisational psychology and adds valuable knowledge and understanding to contemporary research on the ethical context and behaviour variables and the job retention and performance-related factors that affect individuals' turnover intentions and performance within an organisation in today's turbulent and challenging working environment.

The empirically tested ethical context and behaviour model outlined the important ethical culture, ethical climate and ethical leadership elements that should be taken into consideration when designing organisational retention and performance strategies. As noted, studies on the relationships between the constructs which were relevant to this study are scarce, especially within the DRC context.

Furthermore, this study drew attention to the fact that gender, age, educational level and tenure acted as moderators of the relationship between the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and job retention and performance-

related factors (work engagement, job satisfaction, organisational commitment and OCB). These findings add new knowledge that may inform organisational ethics programmes, by emphasising the need to take the biographical details of employees into account.

### **8.5.3 Contribution at a practical level**

This study is important and useful because of the relationships that were found between the antecedents or independent ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and the consequences or dependent job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB). The outcomes will be useful in informing organisational ethics practices designed to address issues related to the retention and performance of employees. Moreover, the study provided practical recommendations for employee retention and performance practices, based on the literature review and empirical results.

In addition, the findings of this study could help industrial and organisational psychologists and human resource practitioners to develop a deeper understanding of the constructs of ethical culture, ethical climate, ethical leadership, employees' level of engagement, job satisfaction, organisational commitment and OCB when considering an ethical context and behaviour model that will positively influence the job retention and performance-related factors of employees in an organisation. The study helped to create a more rounded understanding of the fact that individuals in an organisation differ in terms of their perception of the ethical context and behaviour variables (ethical culture, ethical climate and ethical leadership) and job retention and performance-related factors (work engagement, job satisfaction, organisational commitment and OCB), and showed that it is important that each individual, taking gender, age, educational level and tenure into consideration, be treated fairly and properly, in order to address retention and performance issues in the organisation.

This study emphasised the way in which the ethical context and behaviour variables influence the job retention and performance-related factors. The findings contributed significantly to the body of knowledge relating to the organisational resources or various antecedents that influence job retention and performance-related factors in a specific organisation in the DRC context.

This research has constituted a starting point, in the sense that no substantial evidence to date exists of a relationship between ethical culture, ethical climate, ethical leadership, work

engagement, job satisfaction, organisational commitment and OCB, especially within the DRC organisational context. This study also contributed significantly to the body of knowledge, by providing valuable information for the design of an ethical context and behaviour model and employee retention and performance practices, in particular for males in the early and establishment career stages, who are highly educated and have more experience.

## **8.6. CHAPTER SUMMARY**

This chapter presented the conclusions and limitations of this study, and made recommendations for retention and performance practices and further research. The limitations were discussed with reference to the literature review and the empirical study. After the recommendations for future studies, a summary of the research was then presented, highlighting the extent to which the results of the study provide support for an ethical context and behaviour and retention/performance model for employees in an organisation in the DRC context.

In this study, research aim 7 was consequently achieved, namely to formulate conclusions based on the research findings and to make recommendations for industrial and organisational psychology retention and performance practices, as well as for future research based on the findings of this study.

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## APPENDIX A

Table 7.19

*Results of the Moderated Regression Analysis: The Effects of Supportability and Gender on Satisfaction with Supervisor*

	Satisfaction with supervisor $\beta$	$f^2$
Gender	-.06	
supportability	.50***	
Gender x supportability	.11**	.01
$\Delta R^2$	.01	
F	136.79***	
$\Delta F$	10.18**	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ . \*\* $p \leq 0.01$ . \* $p \leq 0.05$ . Age was coded as follows: Male = 0. Female = 1.  $f^2$  = Cohen's practical effect size.

Table 7.20:

*Results of the Moderated Regression Analysis: The Effects of Law and Codes and Gender on Affective Commitment*

	Affective commitment $\beta$	$f^2$
Gender	-.03	
Law and codes	.69***	
Gender x law and codes	-.08*	.02
$\Delta R^2$	.00	
F	197.76***	
$\Delta F$	5.64*	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ . \*\* $p \leq 0.01$ . \* $p \leq 0.05$ . Age was coded as follows:  $\leq 25 = 0$ .  $\geq 25 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.21

*Results of the Moderated Regression Analysis: The Effects of Clarity, Congruency Supervisor, Supportability, Transparency and Discussability and Age on Dedication, Absorption, Affective Commitment, Continuance Commitment and Normative Commitment*

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuance commitment $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Age	.90***		1.33***		.99***		.1.25***		1.15***	
Clarity	.67***		.70***		.58***		.63***		.58***	
Age x clarity	-1.09***	.03	-1.34***	.04	-.93***	.01	-1.18***	.03	-1.05***	.03
Model statistics										
$\Delta R^2$	.02		.02		.01		.02		.02	
F	198.21***		233.22***		140.75***		181.01***		146.48***	
$\Delta F$	22.44***		36.86***		14.64***		25.49***		18.75***	
Age	.05*		.05		.14***		.13***		.16***	
Congruency supervisor	.66***		.73***		.65***		.73***		.68***	
Age x congruency supervisor	-.08*	.00	-.11***	.02	-.15***	.02	-.14***	.02	-.14***	.02
Model statistics										
$\Delta R^2$	.00		.01		.02		.01		.01	
F	204.90***		278.90***		197.76***		312.43***		246.63***	
$\Delta F$	6.30*		14.40***		23.15***		23.78***		20.06***	
Age	.09**		.09**		.13***		.15***		.17***	
Supportability	.67***		.69***		.60***		.66***		.60***	
Age x supportability	-.19***	.05	-.20***	.02	-.14***	.03	-.17***	.04	-.14***	.2
Model statistics										
$\Delta R^2$	.03		.03		.02		.02		.01	
F	192.31***		.69***		147.08***		206.94***		155.79***	
$\Delta F$	36.86***		212.34***		18.76***		28.42***		19.30***	
Age	.12**		.12***		.14***		.18***		.18***	

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuance commitment $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Transparency	.62***		.67***		.62***		.64***		.66***	
Age x transparency	-.18***	.03	-.22***	.05	-.13***	.05	-.19***	.03	-.16***	.02
Model statistics										
$\Delta R^2$	.02		.03		.01		.02		.02	
F	159.73***		210.55***		170.69***		193.15***		218.06***	
$\Delta F$	28.33***		46.51***		15.31***		31.35***		23.95***	
Age	.09**		.08*		.13***		.14***		.12***	
Discusability	.65***		.69***		.63***		.69***		.69***	
Age x discusability	-.18***	.03	-.18***	.04	-.15***	.02	-.17***	.04	-.09**	.02
Model statistics										
$\Delta R^2$	.02		.02		.02		.02		.01	
F	176.96***		220.63***		173.70***		240.76***		253.52***	
$\Delta F$	27.40***		31.00***		20.15***		28.09***		8.95***	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$  \*\* $p \leq 0.01$  \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.22

*Results of the Moderated Regression Analysis: The Effects of Clarity, Congruency Supervisor, Supportability, Transparency, Discussability and Age on Satisfaction with Supervisor, Satisfaction with Work Itself, Sportsmanship, Courtesy and Altruism*

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Age	.66**		.78**		.87***		1.03***		.78**	
Clarity	.55***		.52***		.56***		.56***		.59***	
Age x clarity	-.59*	.01	-.73**	.01	-.74***	.01	-.93***	.01	-.71**	.02
Model statistics										
$\Delta R^2$	.01		.01		.01		.01		.01	
F	118.86***		98.51***		138.96***		130.94***		147.34**8	
$\Delta F$	5.60*		8.03**		9.11***		14.13***		8.61**	
Age	.09**		.09**		.17***		.16***		.12***	
Congruency supervisor	.64***		.60***		.62***		.63***		.60***	
Age x congruency supervisor	-.08**	.02	-.09*	.02	-.10**	.02	-.15***	.03	-.11**	.02
Model statistics										

	Satisfaction with supervisor β	f <sup>2</sup>	Satisfaction with work itself β	f <sup>2</sup>	Sportsmanship β	f <sup>2</sup>	Courtesy β	f <sup>2</sup>	Altruism β	f <sup>2</sup>
ΔR <sup>2</sup>	.01		.01		.01		.02		.01	
F	192.16***		153.24***		185.19***		192.79***		157.40***	
ΔF	6.84**		7.37*		9.61**		23.22***		11.17***	
Age	.11**		.10**		.17***		.16***		.13***	
Supportability	.59***		.54***		.54***		.58***		.51***	
Age x supportability	-.11**	.01	-.12**	.01	-.09*	.01	-.12***	.02	-.11***	.01
Model statistics										
ΔR <sup>2</sup>	.01		.01		.01		.01		.01	
F	139.18***		111.33***		125.62***		142.96***		101.19***	
ΔF	11.12**		11.53***		7.40*		13.56***		9.01**	
Age	.10**		.13***		.20***		.17***		.11**	
Transparency	.61***		.52***		.62***		.59***		.55***	
Age x transparency	-.07*	.00	-.13***	.01	-.15***	.02	-.13***	.02	-.06	.00
Model statistics										
ΔR <sup>2</sup>	.00		.01		.01		.01		.00	
F	166.81***		102.93***		186.55***		154.59***		126.53***	
ΔF	4.54*		12.68***		18.76***		13.96***		2.42***	
Age	.06*		.09*		.17***		.15***		.10**	

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Discusability	.63***		.51***		.63***		.61***		.56***	
Age x discusability	-.05	.00	-.09*	.01	-.12***	.02	-.13***	.02	-.07	.00
Model statistics										
$\Delta R^2$	.00		.01		.01		.01		.00	
F	178.95***		98.00***		192.32***		166.19***		128.55***	
$\Delta F$	2.16		6.34*		12.47***		13.71***		3.70	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$  \*\* $p \leq 0.01$  \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.23

*Results of the Moderated Regression Analysis: The Effects of Caring, Law and Codes, Independence, and Age on Dedication, Absorption, Affective Commitment, Continuance Commitment and Normative Commitment*

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuanc e commitme nt $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Age	.06*		.08*		.10**		.14***		.16***	
Caring	.65***		.69***		.66***		.74***		.68***	
Age x caring	-.12***	.02	-.18***	.04	-.10**	.02	-.17***	.04	-.16***	.04
Model statistics										
$\Delta R^2$	.01		.02		.01		.02		.02	
F	187.03***		215.12***		202.77***		209.20***		232.18***	
$\Delta F$	13.52***		23.46***		9.74**		29.35***		24.80***	
Age	.06*		.08*		.10***		.15***		.17***	
Law and codes	.70***		.70***		.65***		.66***		.60***	
Age x law and codes	-.10***	.02	-.12***	.02	-.08*	.02	-.16***	.02	-.13***	.02
Model statistics										
$\Delta R^2$	.01		.01		.01		.01		.01	
F	238.82***		240.66***		202.03***		244.76***		158.74***	
$\Delta F$	12.57***		16.86***		6.96*		15.58***		15.82***	

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuance commitment $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Age	.07*		.06*		.11***		.13***		.18***	
Independence	.66***		.68***		.59***		.69***		.60***	
Age x independence	-.11***	.02	-.10***	.02	-.07*	.00	-.11***	.02	-.14***	.02
Model statistics										
$\Delta R^2$	.01		.01		.00		.01		.01	$\Delta R^2$
F	203.72***		221.48***		148.67***		244.76***		164.80***	F
$\Delta F$	12.23***		11.76***		5.33*		15.58***		18.61***	$\Delta F$

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ ,  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size

Table 7.24

*Results of the Moderated Regression Analysis: The Effects of Caring, Law and Codes, Independence, and Age on Satisfaction with Supervisor, Satisfaction with Work Itself, Sportsmanship, Courtesy and Altruism*

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Age	.12***		.09*		.18***		.16***		.12***	
Caring	.63***		.61***		.61***		.61***		.56***	
Age x caring	-.14***	.02	-.12**	.02	-.12***	.02	-.14***	.02	-.11***	.01
Model statistics										
$\Delta R^2$	.01		.01		.01		.01		.01	
F	174.44***		152.13***		174.26***		170.65***		126.11***	
$\Delta F$	17.71***		11.42**		12.23***		17.51***		9.36***	
Age	.11***		.08*		.19***		.17***		.10**	
Law and codes	.65***		.57***		.58***		.61***		.57***	
Age x law and codes	-.11**	.02	-.05	.00	-.12***	.02	-.15***	.03	-.73	.00
Model statistics										
$\Delta R^2$	.01		.00		.01		.02		.00	
F	193.47***		131.53***		151.51***		163.78***		144.50***	
$\Delta F$	12.10**		2.55		14.89***		24.25***		.54	
Age	.12***		.11**		.20***		.18***		.12***	

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Independence	.59***		.56***		.53***		.54***		.59***	
Age x independence	-.11**	.02	-.10**	.01	-.11***	.01	-.13***	.01	-.09**	.02
Model statistics										
$\Delta R^2$	.01		.01		.01		.01		.01	
F	143.25***		124.64***		123.24***		125.28***		152.88***	
$\Delta F$	11.50**		9.70**		11.49***		16.02***		7.47***	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$  \*\* $p \leq 0.01$  \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.25

*Results of the Moderated Regression Analysis: The Effects of Power Sharing, Ethical Guidance, Role Clarification and Age on Dedication, Absorption, Affective Commitment, Continuance Commitment and Normative Commitment*

	<b>Dedication</b>	<b>f<sup>2</sup></b>	<b>Absorption</b>	<b>f<sup>2</sup></b>	<b>Affective</b>	<b>f<sup>2</sup></b>	<b>Continuance</b>	<b>f<sup>2</sup></b>	<b>Normative</b>	<b>f<sup>2</sup></b>
	<b>β</b>		<b>β</b>		<b>commitment</b>		<b>commitment</b>		<b>commitment</b>	
	<b>β</b>		<b>β</b>		<b>β</b>		<b>β</b>		<b>β</b>	
Age	.03		.03		.12***		.14***		.16***	
Power sharing	.71***		.68***		.61***		.70***		.62***	
Age x power sharing	-.11**	.02	-.10**	.02	-.14***	.02	-.18***	.04	-.16***	.03
Model statistics										
ΔR <sup>2</sup>	.01		.01		.01		.02		.02	
F	245.58***		212.08***		157.37***		239.73***		174.88***	
ΔF	11.43**		10.53***		17.59***		32.31***		23.74***	
Age	.03		.02		.11**		.15***		.15***	
Ethical guidance	.66***		.68***		.63***		.68***		.64***	
Age x ethical guidance	-.07*	.00	-.08*	.00	-.13***	.02	-.19***	.04	-.13***	.02

	Dedication β	f <sup>2</sup>	Absorption β	f <sup>2</sup>	Affective commitment β	f <sup>2</sup>	Continuanc e commitmen t β	f <sup>2</sup>	Normative commitment β	f <sup>2</sup>
Model statistics										
ΔR <sup>2</sup>	.00		.00		.01		.02		.01	
F	200.35***		217.11***		171.58***		223.02***		193.65***	
ΔF	4.38*		6.08*		15.19***		35.39***		17.28***	
Age	.03		.04		.12***		.14***		.17***	
Role clarification	.68***		.65***		.56***		.60***		.51***	
Age x role clarification	-2.46*	.00	-.11**	.02	-.11**	.01	-.13***	.02	-.14***	.01
Model statistics										
ΔR <sup>2</sup>	.00		.01		.01		.01		.01	
F	216.72***		179.50***		122.45***		155.29***		105.04***	
ΔF	6.06*		10.60**		10.01**		16.07***		15.21***	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.26

*Results of the Moderated Regression Analysis: The Effects of Power Sharing, Ethical Guidance, Role Clarification and Age on Satisfaction with Supervisor, Satisfaction with Work Itself, Sportsmanship, Courtesy and Altruism*

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Age	.09**		.07*		.16***		.17***		.12**	
Power sharing	.57***		.57***		.63***		.64***		.59***	
Age x power sharing	-.10**	.03	-.09*	.03	-.13***	.04	-.18***	.02	-.12**	
Model statistics										
$\Delta R^2$	.01		.01		.01		.02		.01	
F	127.37***		125.22***		191.91***		184.27***		144.59***	
$\Delta F$	7.67**		5.77*		14.85***		28.98***		12.10**	
Age	.06		.05		.18***		.17***		.12**	
Ethical guidance	.63***		.57***		.55***		.60***		.52***	
Age x ethical guidance	-.05	.02	-.04	.02	-.12**	.05	-.16***	.02	-.10*	
Model statistics										
$\Delta R^2$	.00		.00		.01		.02		.01	
F	182.46***		135.59***		132.18***		155.39***		106.72***	
$\Delta F$	2.11		1.40		10.42**		20.09***		7.48*	

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Age	.06		.07*		.17***		.16***		.13***	
Role clarification	.57***		.52***		.58***		.60***		.57***	
Age x role clarification	-.01	.00	-.05	.00	-.11**	.03	-.15***	.02	-.13***	.01
Model statistics										
$\Delta R^2$	.00		.00		.01		.02		.01	
F	142.76***		103.90***		152.25***		158.69***		131.34***	
$\Delta F$	.12		1.78		10.49***		19.40***		14.87***	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2 =$  Cohen's practical effect size.

Table 7.27

Results of the Moderated Regression Analysis: The Effects of Clarity, Congruency Supervisor, Supportability, Transparency and Discussability and Education on Dedication, Absorption, Affective Commitment, Continuance Commitment and Normative Commitment

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuanc e commitme nt $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Education	.86***		.99***		.82***		.98***		1.06***	
Clarity	.68***		.71***		.58***		.64***		.60***	
Education x clarity	-.94***	.03	-1.07***	.04	-.69**	.02	-.90***	.02	-.89****	.02
Model statistics										
$\Delta R^2$	.02		.02		.01		.01		.02	
F	201.52***		.233.51***		146.36***		179.40***		145.84***	
$\Delta F$	26.62***		31.17***		10.86**		19.48***		21.57***	
Education	-.05		-.05		.14***		.11***		.10***	
Congruency supervisor	.68***		.74***		.63***		.73***		.68***	.00
Education congruency supervisor	x -.09**	.02	-.11***	.04	-.06*	.00	-.10***	.02	-.06*	

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuanc e commitme nt $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Model statistics										
$\Delta R^2$	.01		.01		.00		.01		.00	
F	212.03***		286.86***		194.94***		307.41***		234.65***	
$\Delta F$	10.48**		16.35***		3.93*		13.54***		4.60*	
Education	-.03		-.03		.16***		.13***		.13***	
Supportability	.66***		.68***		.59***		.67***		.61***	
Education supportability	x -.13***	.03	-.14***	.03	-.11***	.02	-.14***	.04	-.15***	.03
Model statistics										
$\Delta R^2$	.02		.02		.01		.02		.02	
F	186.24***		206.38***		153.23***		208.55***		157.95***	
$\Delta F$	20.26***		24.59***		14.15***		25.73***		24.30***	
Education	-.03		-.03		.15***		.12***		.12***	
Transparency	.63***		.68***		.62***		.64***		.67***	
Education transparency	x -.13***	.02	-.14***	.04	-.09**	.02	-.11***	.02	-.11***	.02

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuanc e commitme nt $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Model statistics										
$\Delta R^2$	.01		.02		.01		.01		.01	
F	156.19***		200.72***		177.12***		186.45***		213.74***	
$\Delta F$	17.47***		24.04***		9.66**		13.79***		16.16***	
Education	-.05		-.05		.13***		.11***		.10***	
Discusability	.65***		.69***		.61***		.69***		.70***	
Education discusability	x -.11***	.02	-.12***	.03	-.06*	.00	-.11***	.02	-.10***	.02
Model statistics										
$\Delta R^2$	.01		.01		.00		.01		.01	
F	174.85***		.218.20***		172.59***		235.53***		256.14***	
$\Delta F$	14.26***		16.94***		4.37*		15.41***		13.61***	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ ,  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.28: Results of the Moderated Regression Analysis: The Effects of Clarity, Congruency Supervisor, Supportability, Transparency, Discussability and Education on Satisfaction with Supervisor, Satisfaction with Work Itself, Sportsmanship, Courtesy and Altruism

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmans hip $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Education	.73***		.69**		.96***		.78***		.89***	
Clarity	.57***		.53***		.58***		.56***		.60***	
Education x clarity	-.71**	.02	-.68**	.01	-.82***	.02	-.65**	.01	-.81***	.02
Model statistics										
$\Delta R^2$	.01		.01		.01		.01		.01	
F	119.20***		97.24***		144.05***		130.98***		151.70***	
$\Delta F$	10.53**		9.26**		15.15***		9.26**		14.99***	
Education	.04		.02		.16***		.12***		.10***	
Congruency supervisor	.65***		.61***		.62***		.62***		.59***	
Education x congruency supervisor	-.06*	.00	-.08*	.02	-.07*	.00	-.04	.00	-.05	.00
Model statistics										
$\Delta R^2$	.00		.01		.00		.00		.00	
F	188.93***		151.95***		185.09***		183.61***		153.69***	
$\Delta F$	4.50***		7.51*		6.07*		2.02		2.99	

		Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmans hip $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Education		.06*		.04		.18***		.16***		.12***	
Supportability		.59***		.56***		.55***		.58***		.52***	
Education supportability	x	-.10**	.02	-.13***	.01	-.10***	.02	-.11**	.02	-.10**	.01
Model statistics											
$\Delta R^2$		.01		.01		.01		.01		.01	
F		137.81***		111.83***		130.35***		145.95***		103.04***	
$\Delta F$		11.11***		15.57***		11.15***		12.03**		10.66**	
Education		.06*		.04		.17***		.15***		.12***	
Transparency		.64***		.53***		.63***		.60***		.57***	
Education transparency	x	-.11***	.02	-.10**	.01	-.12***	.02	-.09**	.02	-.10**	.02
Model statistics											
$\Delta R^2$		.01		.01		.01		.01		.01	
F		170.29***		100.23***		190.39***		156.94***		132.30***	
$\Delta F$		13.83***		10.14***		16.50***		8.62**		10.24**	
Education		.04		.03		.16***		.13***		.10***	
Discusability		.65***		.53***		.64***		.61***		.57***	

		Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmans hip $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Education	x	-.09**	.02	-.09*	.01	-.11***	.02	-.08**	.02	-.09**	.02
discusability											
Supportability		.59***		.56***		.55***		.58***		.52***	
Model statistics											
$\Delta R^2$		.01		.01		.01		.01		.01	
F		181.57***		97.83***		197.22***		166.04***		131.78***	
$\Delta F$		8.36***		7.95*		14.56***		7.21**		8.21**	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.29

*Results of the Moderated Regression Analysis: The Effects of Caring, Law and Codes, Independence, and Education on Dedication, Absorption, Affective Commitment, Continuance Commitment and Normative Commitment*

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuance commitment $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Education	-.04		-.04		.15***		.12***		.12***	
Caring	.66***		.69***		.66***		.75***		.69***	
Education x caring	-.10***	.02	-.11***	.02	-.09**	.02	-.15***	.04	-.14***	.04
Model statistics										
$\Delta R^2$	.01		.01		.01		.02		.02	
F	190.24***		213.40***		213.91***		326.85***		233.65***	
$\Delta F$	12.96***		16.94***		10.46**		38.14***		26.36***	
Education	-.04		-.03		.15***		.13***		.12***	
Law and codes	.72***		.73***		.67***		.67***		.61***	
Education x law and codes	-.13***	.02	-.15***	.04	-.12***	.02	-.14***	.04	-.11***	.02
Model statistics										
$\Delta R^2$	.01		.02		.01		.02		.01	
F	247.48		.252.04***		217.57***		208.36***		154.66***	
$\Delta F$	21.16***		30.03***		17.00***		25.65***		13.41***	

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuance commitment $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Education	-.03		-.02		.16***		.14***		.14***	
Independence	.68***		.69***		.60***		.71***		.62***	
Education independence	x -.13***	.02	-.11***	.02	-.09**	.02	-.14***	.02	-.14***	.03
Model statistics										
$\Delta R^2$	.01		.01		.01		.02		.02	
F	209.57***		.225.09***		161.15***		258.31***		166.74***	
$\Delta F$	21.08***		16.05***		9.04**		28.92***		23.93***	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$  \*\* $p \leq 0.01$  \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.30

*Results of the Moderated Regression Analysis: The Effects of Caring, Law and Codes, Independence, and Education on Satisfaction with Supervisor, Satisfaction with Work Itself, Sportsmanship, Courtesy and Altruism*

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Education	.06*		.02		.18***		.15***		.12***	
Caring	.65***		.61***		.63***		.62***		.58***	
Education x caring	-.14***	.03	-.09**	.02	-.15***	.03	-.13***	.02	-.14***	.03
Model statistics										
$\Delta R^2$	.02		.01		.02		.01		.02	
F	176.10***		149.97***		187.14***		176.07***		133.44***	
$\Delta F$	24.49***		8.65**		26.92***		18.57***		21.01***	
Education	.06		.03		.17***		.15***		.12***	
Law and codes	.69***		.60***		.58***		.60***		.61***	
Education x law and codes	-.16***	.03	-.12***	.02	-.09**	.02	-.09*	.02	-.13***	.03
Model statistics										
$\Delta R^2$	.02		.01		.01		.01		.02	
F	200.52***		135.74***		150.24***		157.75***		154.37***	
$\Delta F$	29.41***		15.35***		9.58**		8.07*		18.81***	

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work itself $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Education	.08*		.04		.19***		.17***		.13***	
Independence	.61***		.56***		.56***		.55***		.62***	
Education x independence	-.15***	.03	-.07*	.01	-.14***	.03	-.11**	.02	-.14***	.03
Model statistics										
$\Delta R^2$	.02		.00		.02		.01		.02	
F	148.15***		120.24***		131.15***		127.16***		163.05***	
$\Delta F$	25.11***		4.65*		21.25***		12.06**		22.22***	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ . Age was coded as follows:  $\leq 40 = 0$ .  $\geq 40 = 1$ .  $f^2$  = Cohen's practical effect size.

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuance commitment $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Education	-.05		-.04		.16***		.13***		.14***	
Power sharing	.70***		.68***		.61***		.69***		.62***	
Education x power sharing	-.07*	.02	-.08**	.02	-.11***	.02	-.13***	.02	-.14***	.03
Model statistics										
$\Delta R^2$	.01		.01		.01		.01		.02	
F	246.49***		213.34***		167.19***		240.10***		166.74***	
$\Delta F$	7.52***		8.77**		14.60***		21.09***		24.12***	
Education	-.02		-.02		.17***		.14***		.13***	
Ethical guidance	.66***		.68***		.63***		.68***		.63***	
Education x ethical guidance	-.06*	.00	-.09**	.02	-.09**	.02	-.12***	.02	-.14***	.02
Model statistics										
$\Delta R^2$	.00		.01		.01		.01		.01	
F	200.91***		219.75***		188.26***		227.40***		202.80***	
$\Delta F$	4.50*		10.36**		11.07***		20.23***		18.30***	

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Affective commitment $\beta$	$f^2$	Continuance commitment $\beta$	$f^2$	Normative commitment $\beta$	$f^2$
Education	-.04		-.03		.16***		.13***		.12***	
Role clarification	.70***		.66		.56***		.61***		.51***	
Education x role clarification	-.10***	.02	-.11***	.01	-.10**	.01	-.11***	.02	-.06	
Model statistics										
$\Delta R^2$	.01		.01		.01		.01		.00	
F	224.49***		183.88***		131.31***		157.16***		99.25***	
$\Delta F$	13.60***		14.59***		10.16**		12.94***		3.44	

Note: N = 409. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$  \*\* $p \leq 0.01$  \* $p \leq 0.05$ . Age was coded as follows:  $\leq 25 = 0$ .  $\geq 25 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.32

*Results of the Moderated Regression Analysis: The Effects of Power Sharing, Ethical Guidance, Role Clarification and Education on Satisfaction with Supervisor, Satisfaction with Work Itself, Sportsmanship, Courtesy and Altruism*

	Satisfaction with supervisor β	f <sup>2</sup>	Satisfaction with work itself β	f <sup>2</sup>	Sportsmanship β	f <sup>2</sup>	Courtesy β	f <sup>2</sup>	Altruism β	f <sup>2</sup>
Education	.06		.02		.16***		.15***		.12***	
Power sharing	.57***		.56***		.64***		.63***		.60***	
Education x power sharing	-.06*	.00	-.03	.00	-.12***	.02	-.10**	.02	-.11***	.02
Model statistics										
ΔR <sup>2</sup>	.00		.00		.01		.01		.01	
F	125.49***		122.50***		203.35***		183.53***		149.33***	
ΔF	4.12*		1.01		18.03***		12.19**		13.83***	
Education	.07		.04		.19***		.17***		.13***	
Ethical guidance	.64***		.57***		.57***		.60***		.54***	
Education x ethical guidance	-.07*	.00	.00	.00	-.11***	.02	-.09**	.02	-.09**	.01
Model statistics										
ΔR <sup>2</sup>	.00		.00		.01		.01		.01	
F	187.06***		135.51***		145.89***		162.88***		113.17***	
ΔF	5.39***		.02		13.83***		9.64**		8.52**	

	Satisfaction with supervisor $\beta$	$f^2$	Satisfaction with work $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$	Altruism $\beta$	$f^2$
Education	.04		.02		.17***		.15***		.11***	
Role clarification	.57***		.52***		.60***		.60***		.58***	
Education x role clarification	.02	.00	-.01	.01	-.10***	.02	-.08*	.02	-.10**	.01
Model statistics										
$\Delta R^2$	.00		.00		.01		.01		.01	
F	142.14***		102.08***		158.63***		157.85***		131.53***	
$\Delta F$	.23		.03		11.91***		6.54*		9.93**	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ . Age was coded as follows:  $\leq 25 = 0$ .  $\geq 25 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.33

*Results of the Moderated Regression Analysis: The Effects of Clarity, Congruency Supervisor, Discussability, and Tenure on Dedication, Absorption, Sportsmanship, Courtesy and Altruism*

	<b>Dedication</b> <b>β</b>	<b>f<sup>2</sup></b>	<b>Absorption</b> <b>β</b>	<b>f<sup>2</sup></b>	<b>Sportsmanship</b> <b>f<sup>2</sup></b>	<b>Courtesy</b> <b>β</b>	<b>f<sup>2</sup></b>
Tenure	.40*		.41*		.52*	.62**	
Clarity	.69***		.72***		.64***	.65***	
Tenure x clarity	-.38	.01	-.38*	.02	-.51*	-.62**	.01
Model statistics							
ΔR <sup>2</sup>	.00		.00		.01	.01	
F	189.23***		215.67***		127.41***	122.05***	
ΔF	4.50*		4.88*		7.05*	10.36**	
Tenure	.03		.02		.02	.01	
Congruency supervisor	.71***		.76***		.65***	.68***	
Tenure x congruency supervisor	-.09*	.01	-.08*	.02	-.06	-.09*	.02
Model statistics							
ΔR <sup>2</sup>	.00		.00		.00	.00	
F	205.18***		273.22***		169.74***	175.35	
ΔF	5.78*		4.78*		2.04	5.01*	
Tenure	.03		.03		.73	.02	

	Dedication $\beta$	$f^2$	Absorption $\beta$	$f^2$	Sportsmanship $\beta$	$f^2$	Courtesy $\beta$	$f^2$
Discusability	.67***		.72***		.65***		.66***	
Tenure x discusability	-.09*	.01	-.10*	.01	-.04	.02	-.08*	.02
Model statistics								
$\Delta R^2$	.00		.01		.00		.00	
F	165.95***		207.20***		178.29***		156.54***	
$\Delta F$	4.94*		6.77*		1.05		4.05*	

Note: N = 839. The results represent the final step in the regression model. Standardised regression beta weights ( $\beta$ ) significant at \*\*\* $p \leq 0.001$  , \*\* $p \leq 0.01$  , \* $p \leq 0.05$ . Tenure was coded as follows:  $\leq 5 = 0$  .  $\geq 5 = 1$ .  $f^2$  = Cohen's practical effect size.

Table 7.34

*Summary of the Significant Moderators of the Relationship between the Best Fit Model Ethical Context and Behaviour and the Job Retention and Performance*

<b>Ethical context and behaviour variables</b>	<b>Moderator: Gender</b>	<b>Job retention and performance-related factors</b>
<b>Clarity</b> <b>Congruency supervisor</b> <b>Supportability</b> <b>Transparency</b> <b>Discusability</b> <b>Caring</b> <b>Law and codes</b> <b>Independence</b> <b>Power sharing</b> <b>Ethical guidance</b> <b>Role clarification</b>		Dedication, absorption, affective, continuance, normative commitment Satisfaction with supervisor Satisfaction with work itself Sportsmanship, courtesy and altruism
<b>Ethical context and behaviour variables</b> <b>Clarity</b> <b>Congruency supervisor</b> <b>Supportability</b> <b>Transparency</b> <b>Discusability</b> <b>Caring</b> <b>Law and codes</b> <b>Independence</b> <b>Power sharing</b> <b>Ethical guidance</b> <b>Role clarification</b>	<b>Moderator: Age</b>	<b>Job retention and performance-related factors</b> Dedication, absorption, affective, continuance, normative commitment Satisfaction with supervisor Satisfaction with work itself Sportsmanship, courtesy and altruism
<b>Ethical context and behaviour variables</b> <b>Clarity</b> <b>Congruency supervisor</b> Supportability Transparency Discusability Caring Law and codes Independence Power sharing Ethical guidance Role clarification	<b>Moderator: Education</b>	<b>Job retention and performance-related factors</b> Dedication, absorption, affective, continuance, normative commitment Satisfaction with supervisor Satisfaction with work itself Sportsmanship, courtesy and altruism
<b>Ethical context and behaviour variables</b> <b>Clarity</b> <b>Congruency supervisor</b> <b>Supportability</b> <b>Transparency</b> <b>Discusability</b> <b>Caring</b> <b>Law and codes</b> <b>Independence</b> <b>Power sharing</b> <b>Ethical guidance</b> <b>Role clarification</b>	<b>Moderator: Tenure</b>	<b>Job retention and performance-related factors</b> Dedication, absorption, affective, continuance, normative commitment Satisfaction with supervisor Satisfaction with work itself Sportsmanship, courtesy and altruism

Table 7.35

*Results of Mann-Whitney U Test for Gender in terms of Clarity, Congruency Supervisor, Supportability, Transparency, and Discusability*

<b>Moderating variables</b>	<b>Gender group</b>	<b>N</b>	<b>Mean Rank</b>	<b>Mann-Whitney U</b>	<b>Z</b>	<b>P</b>
Gender: Clarity	Males =0	573	426.61	71275.000	-1.344	.179
	Females= 1	265	402.48	106255.00		
Gender: Congruency supervisor	Males =0	574	431.77	69299.000	-2.080	.038
	Females= 1	265	394.51	104544.00		
Gender: Supportability	Males = 0	574	429.72	70473.000	-1.718	.086
	Females= 1	265	398.94	105718.00		
Gender: Transparency	Males = 0	574	428.21	70771.000	-1.540	.124
	Females= 1	265	400.57	105751.00		
Gender: Discusability	Males = 0	574	425.66	72806.500	-.997	.319
	Females =1	265	407.74	108051.50		

Table 7.36

*Results of Mann-Whitney U Test for Gender in terms of Caring, Law and Codes and Independence*

<b>Moderating variables</b>		<b>N</b>	<b>Mean Rank</b>	<b>Mann-Whitney U</b>	<b>Z</b>	<b>P</b>
Gender: Caring	Males = 0	574	428.48	71189.500	-1.493	.136
	Females = 1	265	401.64	106434.50		
Gender: Law and codes	Males = 0	574	434.80	66011.000	-2.890	.004
	Females = 1	265	382.99	100727.00		
Gender: Independence	Males =0	574	429.60	70544.500	-1.699	.089
	Females =1	265	399.21	105789.50		

Table 7.37

*Results of Mann-Whitney U Test for Gender in terms of Power Sharing, Ethical Guidance and Role Clarification*

Moderating variables		N	Mean Rank	Mann-Whitney U	Z	P
Gender: Power sharing	Males = 0	574	433.19	68483.500 103728.50	-2.329	.020
	Females = 1	265	391.43			
Gender: Ethical guidance	Males = 0	574	429.39	70664.500 105909.50	-1.657	.097
	Females = 1	265	399.66			
Gender: Role clarification	Males = 0	574	424.69	72951.000 108196.00	-.918	.359
	Females = 1	265	408.29			

Table 7.38

*Results of Kruskal-Wallis Test for Age in terms of Clarity, Congruency Supervisor, Supportability, Transparency, and Discussability*

Moderating variables	Age groups	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Clarity	≥ 25	212	389.15	20.880	3	.000
	26 – 40	527	412.38			
	31 – 55	83	525.27			
	56+	15	480.60			
Congruency supervisor	≥ 25	212	387.52	20.447	3	.000
	26 – 40	529	414.78			
	31 – 55	83	516.46			
	56+	15	529.40			
Supportability	≥ 25	212	400.40	24.868	3	.000
	26 – 40	529	406.80			
	31 – 55	83	537.62			
	56+	15	511.83			
Transparency	≥ 25	212	398.01	25.838	3	.000
	26 – 40	529	406.73			
	31 – 55	83	534.51			
	56+	15	545.00			
Discussability	≥ 25	212	385.07	34.103	3	.000
	26 – 40	529	409.76			
	31 – 55	83	548.05			
	56+	15	566.07			

Table 7.39

*Results of Kruskal-Wallis Test for Age in terms of Caring, Law and Codes and Independence*

Moderating variables	Age groups	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Caring	≥ 25	212	372.34	31.728	3	.000
	26 – 40	529	417.20			
	31 – 55	83	514.02			
	56+	15	522.60			
Law and codes	≥ 25	212	385.73	19.151	3	.000
	26 – 40	529	414.33			
	31 – 55	83	504.58			
	56+	15	549.80			
Independence	≥ 25	212	381.83	18.107	3	.000
	26 – 40	529	419.96			
	31 – 55	83	491.96			
	56+	15	565.50			

Table 7.40

*Results of Kruskal-Wallis Test for Age in terms of Power Sharing, Ethical Guidance and Role Clarification*

Moderating variables	Age groups	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Power sharing	≥ 25	212	385.87	34.461	3	.000
	26 – 40	529	409.58			
	31 – 55	83	540.91			
	56+	15	600.87			
Ethical guidance	≥ 25	212	390.60	31.942	3	.000
	26 – 40	529	408.07			
	31 – 55	83	548.25			
	56+	15	546.57			
Role clarification	≥ 25	212	396.51	31.697	3	.000
	26 – 40	529	405.96			
	31 – 55	83	525.59			
	56+	15	633.90			

Table 7.41

*Results of Kruskal-Wallis Test for Education in terms of Clarity, Congruency Supervisor, Supportability, Transparency, and Discusability*

Moderating variables	Educational level	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Clarity	Matric	185	343.69	34.571	4	.000
	Bachelor	235	410.57			
	Honours degree	322	452.41			
	Master	90	486.68			
	Doctorate	5	231.70			
Congruency supervisor	Matric	186	344.72	36.984	4	.000
	Bachelor	236	399.95			
	Honours degree	322	460.41			
	Master	90	489.04			
	Doctorate	5	321.60			
Supportability	Matric	186	354.74	23.608	4	.000
	Bachelor	236	420.51			
	Honours degree	322	442.55			
	Master	90	480.36			
	Doctorate	5	285.00			
Transparency	Matric	186	332.40	37.146	4	.000
	Bachelor	236	419.99			
	Honours degree	322	454.43			
	Master	90	478.23			
	Doctorate	5	312.80			
Discusability	Matric	186	319.96	52.302	4	.000
	Bachelor	236	415.95			
	Honours degree	322	457.74			
	Master	90	507.61			
	Doctorate	5	325.20			

Table 7.42

*Results of Kruskal-Wallis Test for Education in terms of Caring, Law and Codes and Independence*

Moderating variables	Educational levels	N	Mean Rank	Chi-Square (X <sup>2</sup> )	Z	P
Caring	Matric	186	333.70	41.344	4	.000
	Bachelor	236	412.89			
	Honours degree	322	455.29			
	Master	90	497.78			
	Doctorate	5	293.30			
Law and codes	Matric	186	343.18	29.144	4	.000
	Bachelor	236	413.50			
	Honours degree	322	447.97			
	Master	90	481.43			
	Doctorate	5	394.90			
Independence	Matric	186	370.84	17.207	4	.000
	Bachelor	236	404.47			
	Honours degree	322	452.16			
	Master	90	453.27			
	Doctorate	5	311.50			

Table 7.43

*Results of Kruskal-Wallis Test for Education in terms of Power Sharing, Ethical Guidance and Role Clarification*

Moderating variables	Educational level	N	Mean Rank	Chi-Square (X <sup>2</sup> )	Z	P
Power sharing	Matric	186	331.11	38.322	4	.000
	Bachelor	236	417.26			
	Honours degree	322	459.82			
	Master	90	471.39			
	Doctorate	5	367.10			
Ethical guidance	Matric	186	354.38	32.303	4	.000
	Bachelor	236	403.52			
	Honours degree	322	469.52			
	Master	90	433.17			
	Doctorate	5	212.80			
Role clarification	Matric	186	337.34	37.919	4	.000
	Bachelor	236	408.99			
	Honours degree	322	458.16			

Master	90	483.87
Doctorate	5	307.10

Table 7.44

*Results of Kruskal-Wallis Test for Tenure in terms of Clarity, Congruency Supervisor, Supportability, Transparency, and Discussability*

Moderating variables	Tenure level	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Clarity	Less than 1 year	76	452.64	25.042	6	.000
	1 - 2 years	57	486.39			
	3 – 5 years	149	405.54			
	6 – 10 years	508	399.02			
	11 – 15 years	27	498.94			
	16 – 20 years	16	627.16			
	21 +	4	485.50			
Congruency supervisor	Less than 1 year	76	440.31	18.771	6	.005
	1 -2 years	57	494.16			
	3 – 5 years	149	432.52			
	6 – 10 years	510	398.81			
	11 – 15 years	27	435.94			
	16 – 20 years	16	594.56			
	21 +	4	406.25			
Supportability	Less than 1 year	76	427.49	16.224	6	.013
	1 -2 years	57	477.99			
	3 – 5 years	149	405.99			
	6 – 10 years	510	408.50			
	11 – 15 years	27	449.72			
	16 – 20 years	16	617.69			
	21 +	4	448.13			
Transparency	Less than 1 year	76	451.86	19.934	6	.003
	1 -2 years	57	479.14			
	3 – 5 years	149	418.29			
	6 – 10 years	509	398.21			
	11 – 15 years	27	522.63			
	16 – 20 years	16	569.63			
	21 +	4	412.38			
Discussability	Less than 1 year	76	487.48	32.258	6	.000
	1 -2 years	57	493.30			
	3 – 5 years	149	447.10			
	6 – 10 years	510	384.58			
	11 – 15 years	27	524.87			
	16 – 20 years	16	526.00			
	21 +	4	467.38			

Table 7.45

*Results of Kruskal-Wallis Test for Tenure in terms of Caring, Law and Codes and Independence*

Moderating variables	Tenure level	N	Mean Rank	Chi-square (X <sup>2</sup> )	Z	P
Caring	Less than 1 year	76	459.13	42.099	6	.000
	1 - 2 years	57	485.17			
	3 – 5 years	149	444.44			
	6 – 10 years	510	384.29			
	11 – 15 years	27	607.54			
	16 – 20 years	16	577.66			
	21 +	4	494.25			
Law and codes	Less than 1 year	76	479.03	31.025	6	.000
	1 -2 years	57	505.02			
	3 – 5 years	149	425.45			
	6 – 10 years	507	387.31			
	11 – 15 years	27	527.94			
	16 – 20 years	16	541.50			
	21 +	4	499.50			
Independence	Less than 1 year	76	422.78	14.474	6	.025
	1 -2 years	57	439.03			
	3 – 5 years	149	453.31			
	6 – 10 years	510	399.48			
	11 – 15 years	27	529.89			
	16 – 20 years	16	502.97			
	21 +	4	397.25			

Table 7.46

*Results of Kruskal-Wallis Test for Tenure in terms of Power Sharing, Ethical Guidance and Role Clarification*

Moderating variables	Tenure level	N	Mean Rank	Chi-square (X <sup>2</sup> )	Z	P
Power sharing	Less than 1 year	79	446.73	25.135	6	.000
	1 -2 years	57	525.44			
	3 – 5 years	149	413.11			
	6 – 10 years	510	397.95			
	11 – 15 years	27	502.61			
	16 – 20 years	16	561.53			
	21 +	5	354.63			
Ethical guidance	Less than 1 year	76	446.38	31.317	6	.000
	1 -2 years	57	475.91			
	3 – 5 years	149	404.01			
	6 – 10 years	510	402.00			
	11 – 15 years	27	573.02			
	16 – 20 years	16	611.75			
	21 +	4	212.25			
Role clarification	Less than 1 year	76	479.47	41.168	6	.000
	1 -2 years	57	534.60			
	3 – 5 years	149	439.36			
	6 – 10 years	509	381.82			
	11 – 15 years	27	527.50			
	16 – 20 years	16	536.44			
	21 +	4	469.75			

Table 7.47

*Results of Mann-Whitney U Test for Gender in terms of Dedication and Absorption*

Moderator Variables	Gender group	N	Mean Rank	Mann-Whitney U	Z	P
Gender: Dedication	Males=0	574	433.37	68380.500	-2.376	.018
	Females= 1	265	391.04	103625.50		
Gender: Absorption	Male =0	574	430.68	69925.500	-1.888	.059
	Females=1	265	396.87	105170.50		

Table 7.48

*Results of Mann-Whitney U Test for Gender in terms of Satisfaction with Supervisor and Satisfaction with Work Itself*

<b>Moderator Variables</b>	<b>Gender group</b>	<b>N</b>	<b>Mean Rank</b>	<b>Mann-Whitney U</b>	<b>Z</b>	<b>P</b>
Gender: Satisfaction with supervisor	Males=0	574	425.03	73168.000	-.892	.372
	Females= 1	265	409.11	108413.00		
Gender: Satisfaction with work itself	Male =0	574	432.41	68933.500	-	.027
	Females=1	265	393.13	104187.50		

Table 7.49

*Results of Mann-Whitney U Test for Gender in terms of Affective, Continuance, and Normative Commitment*

Moderating variables		N	Mean Rank	Mann-Whitney U	Z	P
Gender: Affective commitment	Males = 0	574	425.83	72706.000	-1.032	.302
	Females = 1	265	407.36	107951.00		
Gender: Continuance commitment	Males = 0	574	427.44	71211.000	-1.404	.160
	Females = 1	265	402.24	106191.00		
Gender: Normative commitment	Males = 0	574	423.74	73908.000	-.660	.509
	Females = 1	265	411.90	109153.00		

Table 7.50

*Results of Mann-Whitney U Test for Gender in terms of Sportsmanship, Courtesy, and Altruism*

Moderating variables		N	Mean Rank	Mann-Whitney U	Z	P
Gender: Sportsmanship	Males = 0	574	431.78	68483.500	-	.114
	Females = 1	265	394.48	104538.50		
Gender: Courtesy	Males = 0	574	428.09	70664.500	-	.153
	Females = 1	265	402.48	106658.50		
Gender: Altruism	Males = 0	574	428.92	72951.000	-	.037
	Females = 1	265	400.67	106178.00		

Table 7.51

*Results of Kruskal-Wallis Test for Age in terms of Dedication, Absorption, and Satisfaction with Supervisor, Satisfaction with Work Itself, Affective, Continuance, and Normative Commitment, Sportsmanship, Courtesy, and Altruism*

Moderating variables	Age groups	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Dedication	≥ 25	212	412.73	12.655	3	.005
	26 – 40	527	409.60			
	31 – 55	83	475.05			
	56+	15	585.00			
Absorption	≥ 25	212	415.00	9.213	3	.027
	26 – 40	529	410.18			
	31 – 55	83	471.66			
	56+	15	551.07			
Satisfaction with supervisor	≥ 25	212	386.48	22.726	3	.000
	26 – 40	529	414.35			
	31 – 55	83	517.42			
	56+	15	554.00			
Satisfaction with work itself	≥ 25	212	377.55	21.516	3	.000
	26 – 40	529	419.73			
	31 – 55	83	511.36			
	56+	15	524.03			
Affective commitment	≥ 25	212	386.72	23.927	3	.000
	26 – 40	529	413.96			
	31 – 55	83	513.69			
	56+	15	584.77			
Continuance commitment	≥ 25	212	389.36	25.005	3	.000
	26 – 40	529	411.10			
	31 – 55	83	521.48			
	56+	15	575.20			
Normative commitment	≥ 25	212	371.92	36.830	3	.000
	26 – 40	529	415.29			
	31 – 55	83	546.16			
	56+	15	567.53			
Sportsmanship	≥ 25	212	386.77	40.489	3	.000
	26 – 40	529	406.78			
	31 – 55	83	558.85			
	56+	15	587.60			

Moderating variables	Age groups	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Courtesy	≥ 25	212	384.65	36.061	3	.000
	26 – 40	529	409.96			
	31 – 55	83	536.84			
	56+	15	627.13			
Altruism	≥ 25	212	396.13	28.969	3	
	26 – 40	529	407.53			
	31 – 55	83	526.38			
	56+	15	608.37			

Table 7.52

*Results of Kruskal-Wallis Test for Education in terms of Dedication, Absorption, Satisfaction with Supervisor, Satisfaction with Work Itself, Affective, Continuance and Normative Commitment, Sportsmanship, Courtesy, and Altruism*

Moderating variables	Educational level	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Dedication	Matric	185	362.90	17.754	4	.001
	Bachelor	235	426.76			
	Honours degree	322	452.49			
	90	409.88				
	Master	5	314.70			
Absorption	Doctorate			16.763	4	.002
	Matric	186	368.50			
	Bachelor	236	425.44			
	Honours degree	322	451.13			
	90	410.52				
Satisfaction with supervisor	Master	5	244.60	34.162	4	.000
	Doctorate					
	Matric	186	337.63			
	Bachelor	236	413.63			
	Honours degree	322	458.03			
Satisfaction with work itself	90	471.11	21.119	4	.000	
	Master	5				415.70
	Doctorate					
	Matric	186				356.90
	Bachelor	236				422.81
Honours degree	322	443.51				
90	466.69					
Master	5	280.20				
Doctorate						

Moderating variables	Educational level	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Affective commitment	Matric	186	324.41	63.505	4	.000
	Bachelor	236	407.02			
	Honours degree	322	447.66			
	Master	90	556.56			
	Doctorate	5	349.40			
Continuance commitment	Matric	186	339.68	49.641	4	.000
	Bachelor	236	389.24			
	Honours degree	322	459.20			
	Master	90	523.61			
	Doctorate	5	370.40			
Normative commitment	Matric	186	319.35	57.186	4	.000
	Bachelor	236	411.33			
	Honours degree	322	456.90			
	Master	90	523.37			
	Doctorate	5	336.30			
Sportsmanship	Matric	186	321.01	71.401	4	.000
	Bachelor	236	396.69			
	Honours degree	322	455.75			
	Master	90	560.21			
	Doctorate	5	376.70			
Courtesy	Matric	186	321.75	73.547	4	.000
	Bachelor	236	391.56			
	Honours degree	322	460.62			
	Master	90	557.72			
	Doctorate	5	321.90			
Altruism	Matric	186	340.22	50.766	4	.000
	Bachelor	236	388.96			
	Honours degree	322	460.55			
	Master	90	524.28			
	Doctorate	5	365.20			

Table 7.53

*Results of Kruskal-Wallis Test for Tenure in terms of Dedication, Absorption, Satisfaction with Supervisor, Satisfaction with Work Itself, Affective, Continuance and Normative Commitment, Sportsmanship, Courtesy, and Altruism*

Moderating variables	Tenure level	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Dedication	Less than 1 year	76	385.94	5.153	6	.524
	1 - 2 years	57	420.26			
	3 – 5 years	149	413.78			
	6 – 10 years	508	420.98			
	11 – 15 years	27	471.20			
	16 – 20 years	16	503.31			
	21 +	4	491.25			
Absorption	Less than 1 year	76	367.40	6.036	6	.419
	1 - 2 years	57	411.67			
	3 – 5 years	149	415.52			
	6 – 10 years	510	425.88			
	11 – 15 years	27	465.20			
	16 – 20 years	16	481.25			
	21 +	4	405.63			
Satisfaction with supervisor	Less than 1 year	76	449.14	29.453	6	.000
	1 - 2 years	57	514.84			
	3 – 5 years	149	412.73			
	6 – 10 years	510	397.25			
	11 – 15 years	27	518.89			
	16 – 20 years	16	601.00			
	21 +	4	294.25			
Satisfaction with work itself	Less than 1 year	76	411.05	25.083	6	.000
	1 - 2 years	57	480.78			
	3 – 5 years	149	447.24			
	6 – 10 years	509	395.48			
	11 – 15 years	27	561.30			
	16 – 20 years	16	547.50			
	21 +	4	371.88			
Affective commitment	Less than 1 year	76	539.44	59.388	6	.000
	1 - 2 years	57	536.91			
	3 – 5 years	149	431.71			
	6 – 10 years	510	375.83			
	11 – 15 years	27	522.19			
	16 – 20 years	16	553.06			
	21 +	4	458.00			

Moderating variables	Tenure level	N	Mean Rank	Chi-Square (X <sup>2</sup> )	df	P
Continuance commitment	Less than 1 year	76	489.95	34.859	6	.000
	1 - 2 years	57	504.33			
	3 – 5 years	149	435.95			
	6 – 10 years	510	384.93			
	11 – 15 years	27	498.65			
	16 – 20 years	16	578.94			
	21 +	4	485.88			
Normative commitment	Less than 1 year	76	487.98	41.339	6	.000
	1 - 2 years	57	536.23			
	3 – 5 years	149	450.47			
	6 – 10 years	510	381.72			
	11 – 15 years	27	464.46			
	16 – 20 years	16	563.41			
	21 +	4	344.38			
Sportsmanship	Less than 1 year	76	522.49	71.015	6	.000
	1 - 2 years	57	553.92			
	3 – 5 years	149	433.39			
	6 – 10 years	510	371.93			
	11 – 15 years	27	563.37			
	16 – 20 years	16	595.59			
	21 +	4	525.00			
Courtesy	Less than 1 year	76	529.99	63.578	6	.000
	1 - 2 years	57	531.04			
	3 – 5 years	149	438.50			
	6 – 10 years	510	373.13			
	11 – 15 years	27	545.69			
	16 – 20 years	16	580.28			
	21 +	4	545.00			
Altruism	Less than 1 year	76	528.39	43.888	6	.000
	1 - 2 years	57	521.70			
	3 – 5 years	149	434.73			
	6 – 10 years	510	381.49			
	11 – 15 years	27	499.63			
	16 – 20 years	16	496.84			
	21 +	4	427.13			

Table 7.54

*Summary of Decisions on Research Hypotheses*

Hypotheses	Supportive evidence provided
H01 There are no statistically significant interrelationships between the ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership and job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour.	No
Ha1 There are statistically significant interrelationships between the ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership and job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour.	Yes
H02 The ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership as a composite set of independent latent variables are not significantly and positively related to job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour as a composite set of dependent latent variables.	No
Ha2 The perceived ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership as a composite set of independent latent variables are significantly and positively related to job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour as a composite set of dependent latent variables.	yes
H03 The ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership do not positively and significantly predict the job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour.	No
Ha3 The perceived ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership positively and significantly predict the job retention and performance conceptualised as work engagement, Job satisfaction, organisational commitment and organisational citizenship behaviour.	yes

Hypotheses	Supportive evidence provided	
H04	Based on the overall statistical relationship between the ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour, the elements of the empirically manifested structural model and the theoretically hypothesised model do not show a good fit.	No
Ha4	Based on the overall statistical relationship between the ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership and the job retention and performance conceptualised work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour, the elements of the empirically manifested structural model and the theoretically hypothesised model show a good fit.	yes
H05	The biographical characteristics (age, gender, educational level and job tenure) do not significantly and positively moderate the relationship between the independent ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour.	No
Ha5	The biographical characteristics (age, gender, educational level and job tenure) significantly and positively moderate the relationship between the independent ethical context and behaviour conceptualised as ethical culture, ethical climate and ethical leadership, and the job retention and performance conceptualised as work engagement, job satisfaction, organisational commitment and organisational citizenship behaviour.	yes
H06	Individuals, according to the various biographical characteristics (gender, age, education and tenure), do not differ significantly regarding the variables manifested in the best fit model.	No
Ha6	Individuals, according to the various biographical variables (gender, age, education and tenure), do not differ significantly regarding the variables manifested in the best fit model.	Yes

## APPENDIX B

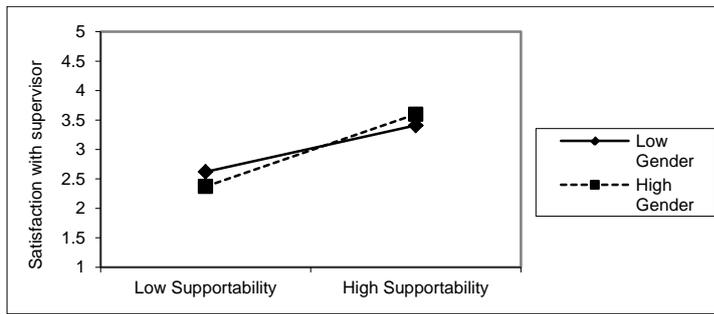


Figure 7.2: Interaction effects between gender, supportability and satisfaction with supervisor. Low gender = males; High gender = females

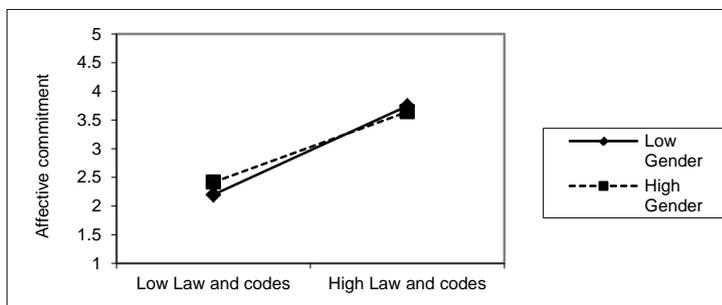


Figure 7.3: Interaction effects between gender, law and codes and affective commitment. Low gender = males; High gender = females

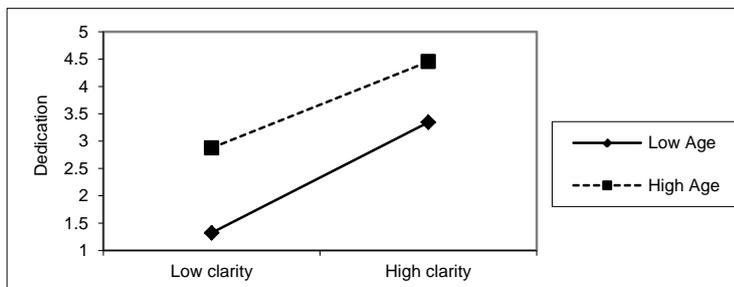


Figure 7.4: Interaction effects between age, clarity and dedication. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

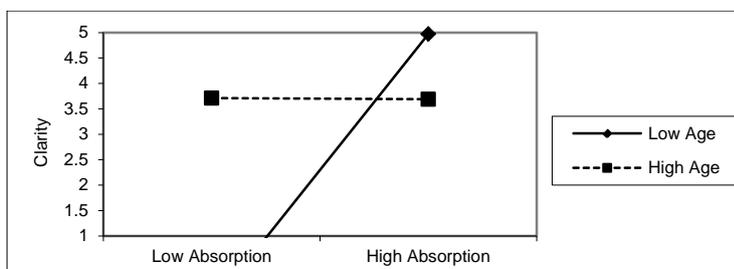


Figure 7.5: Interaction effects between age, clarity and absorption. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

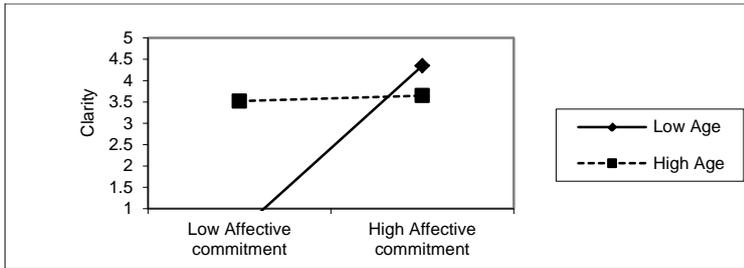


Figure 7.6: Interaction effects between age, clarity and affective commitment.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

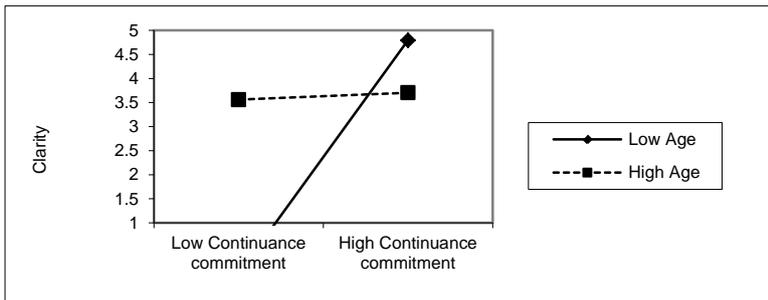


Figure 7.7: Interaction effects between age, clarity and continuance commitment.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

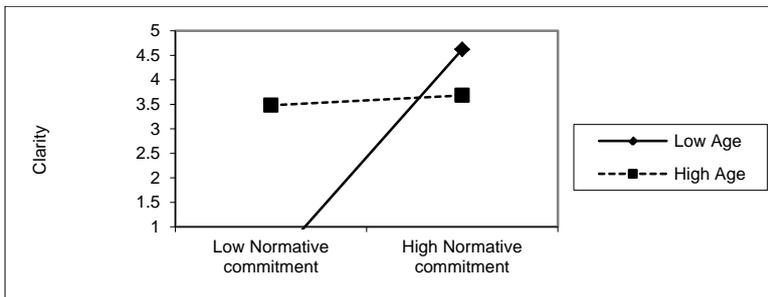


Figure 7.8: Interaction effects between age, clarity and normative commitment.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

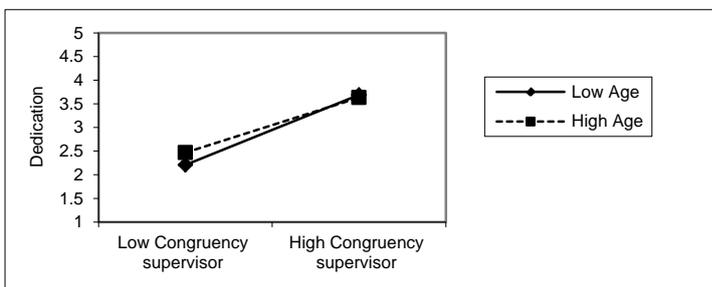


Figure 7.9: Interaction effects between age, congruency supervisor and dedication.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

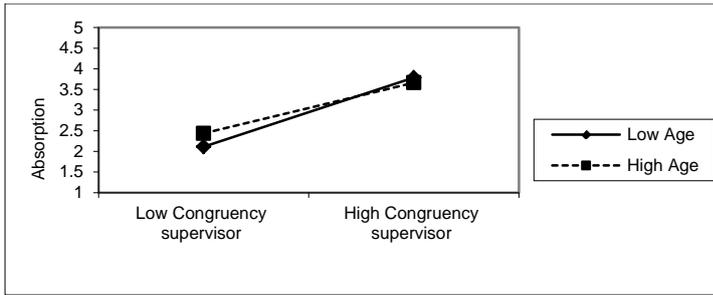


Figure 7.10: Interaction effects between age, congruency supervisor and absorption. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

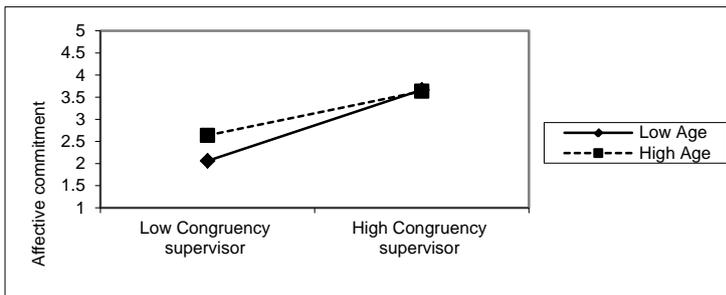


Figure 7.11: Interaction effects between age, congruency supervisor and affective commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

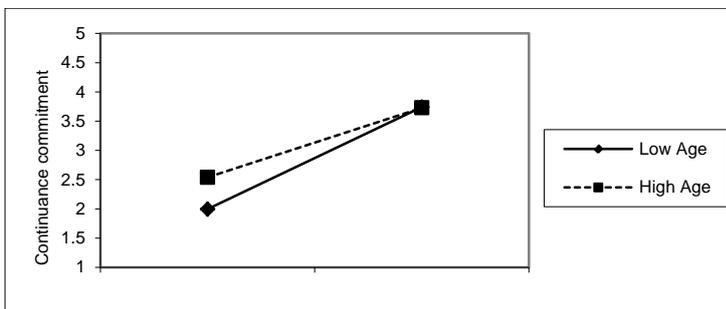


Figure 7.12: Interaction effects between age, congruency supervisor and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

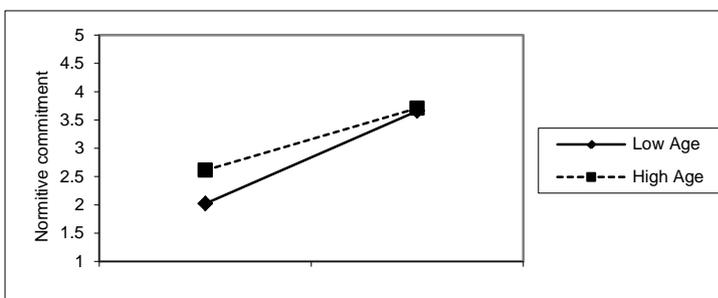


Figure 7.13: Interaction effects between age, congruency supervisor and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

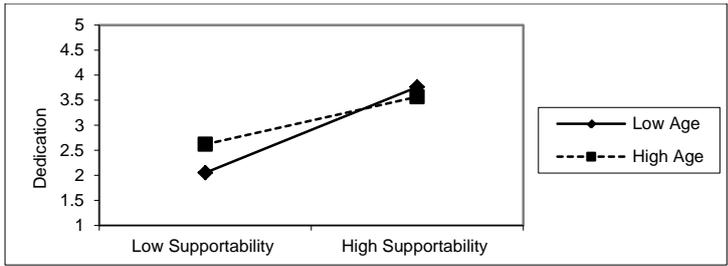


Figure 7.14: Interaction effects between age, supportability and dedication.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

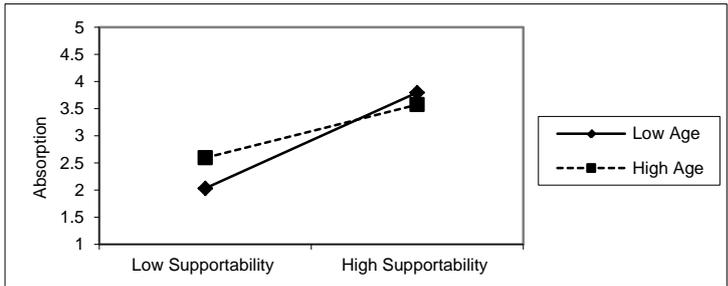


Figure 7.15: Interaction effects between age, supportability and absorption.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

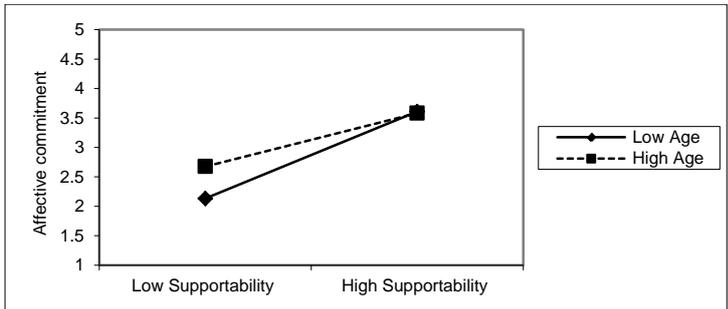


Figure 7.16: Interaction effects between age, supportability and affective commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

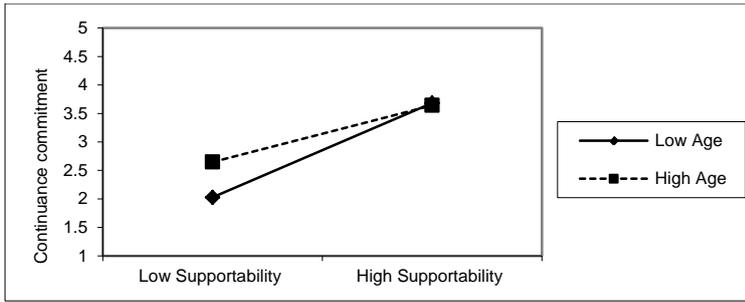


Figure 7.17: Interaction effects between age, supportability and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

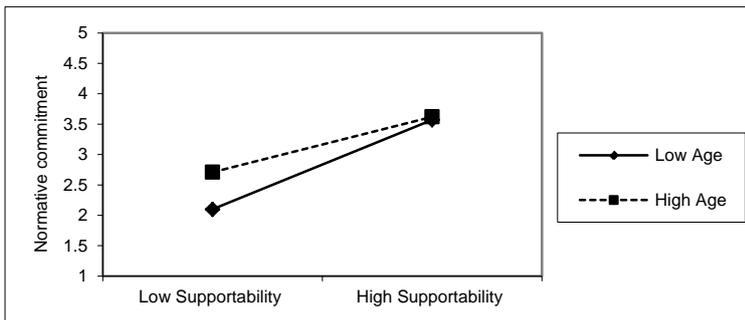


Figure 7.18: Interaction effects between age, supportability and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

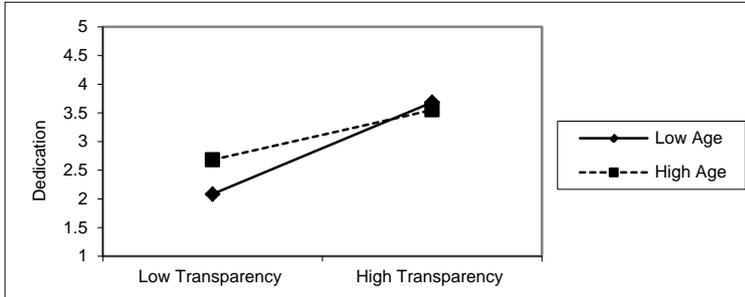


Figure 7.19: Interaction effects between age, transparency and dedication. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

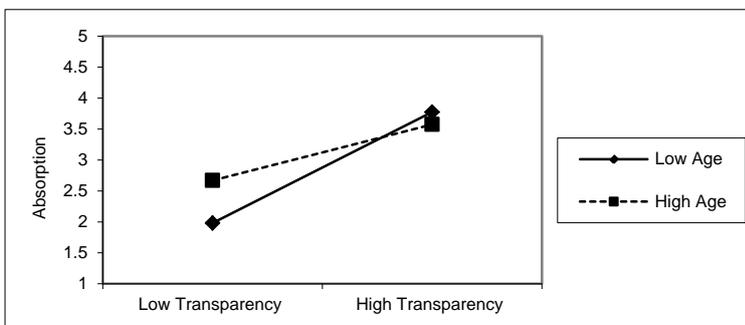


Figure 7.20: Interaction effects between age, transparency and absorption. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

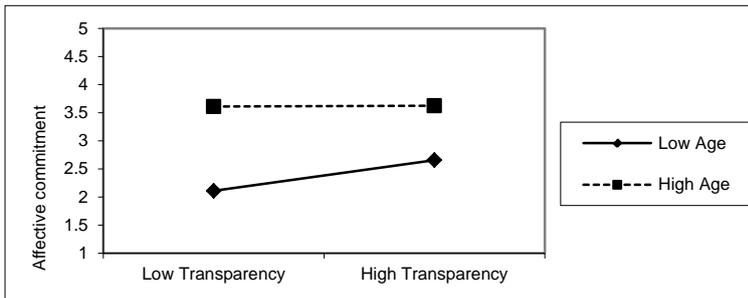


Figure 7.21: Interaction effects between age, transparency and affective commitment.

Low Age =  $\leq 40$ ; High Age =  $\geq 40$

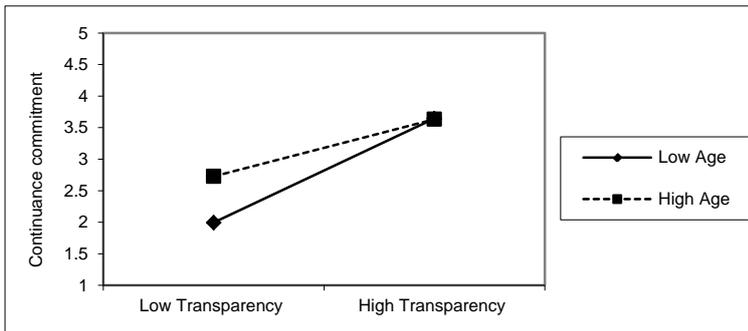


Figure 7.22: Interaction effects between age, transparency and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

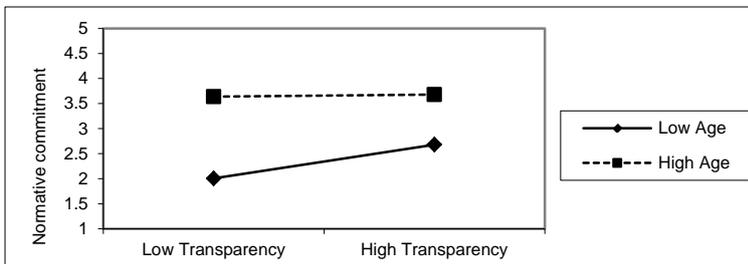


Figure 7.23: Interaction effects between age, transparency and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

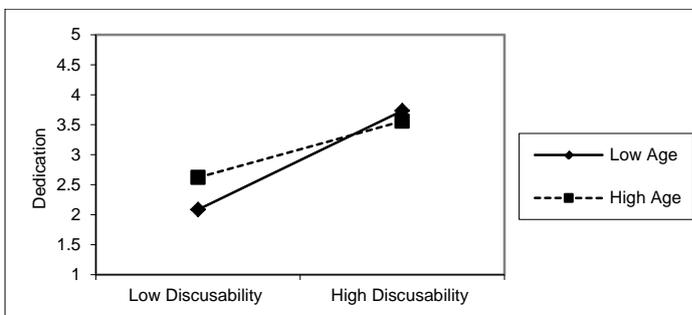


Figure 7.24: Interaction effects between age, discussability and dedication. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

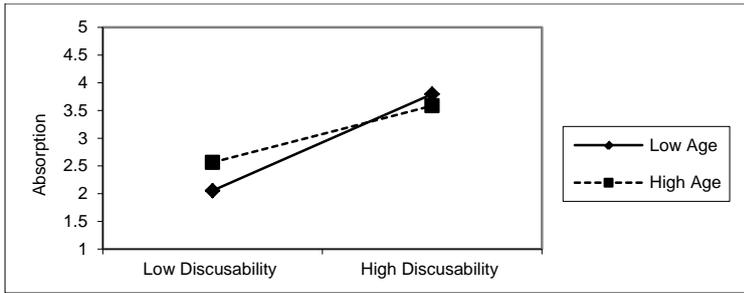


Figure 7.25: Interaction effects between age, discussability and absorption.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

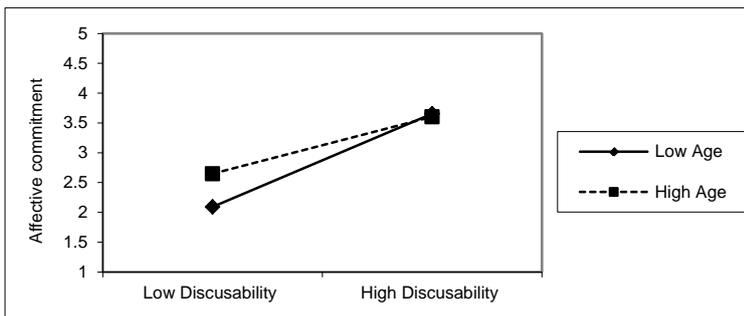


Figure 7.26: Interaction effects between age, discussability and affective commitment.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

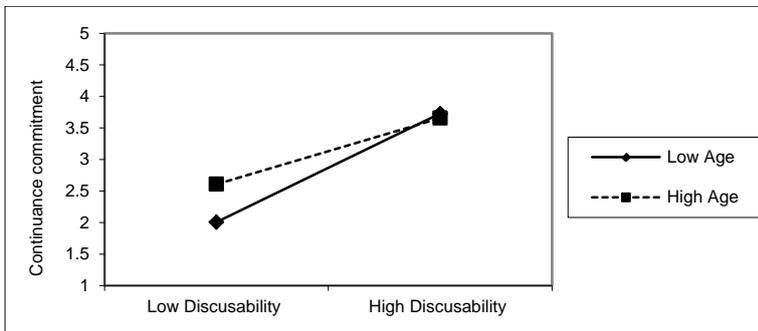


Figure 7.27: Interaction effects between age, discussability and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

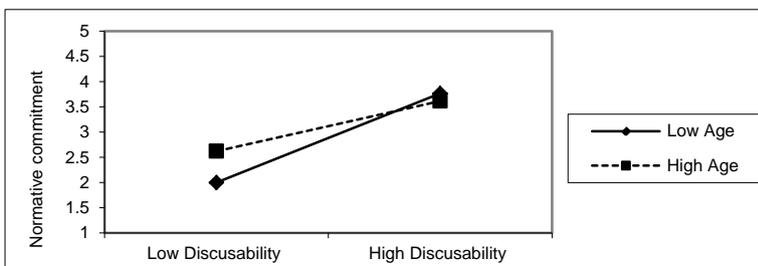


Figure 7.28: Interaction effects between age, discussability and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

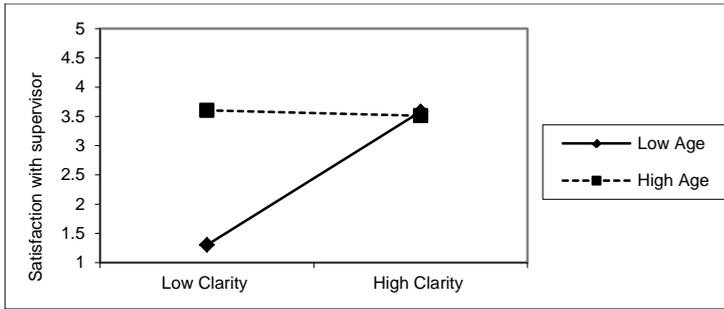


Figure 7.29: Interaction effects between age, clarity and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

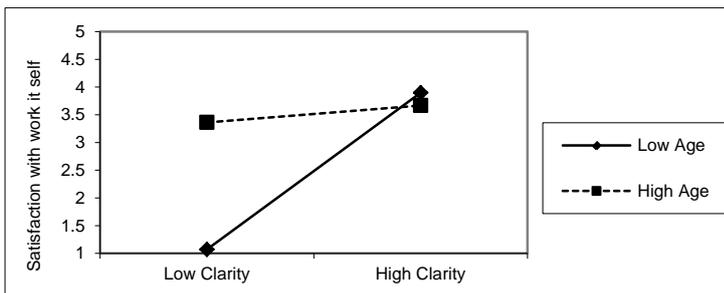


Figure 7.30: Interaction effects between age, clarity and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

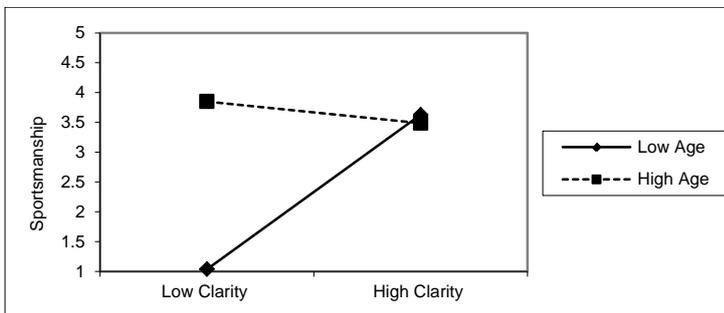


Figure 7.31: Interaction effects between age, clarity and sportsmanship. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

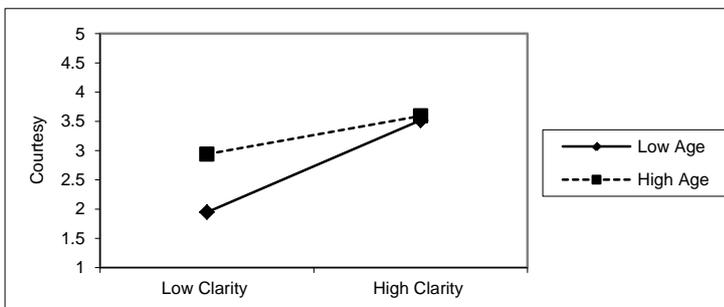


Figure 7.32: Interaction effects between age, clarity and courtesy. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

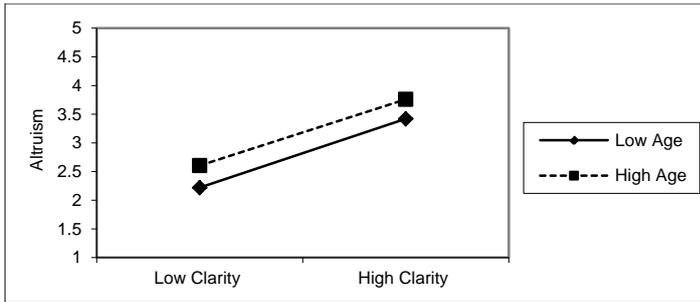


Figure 7.33: Interaction effects between age, clarity and altruism.

Low Age =  $\leq 40$ ; High Age =  $\geq 40$

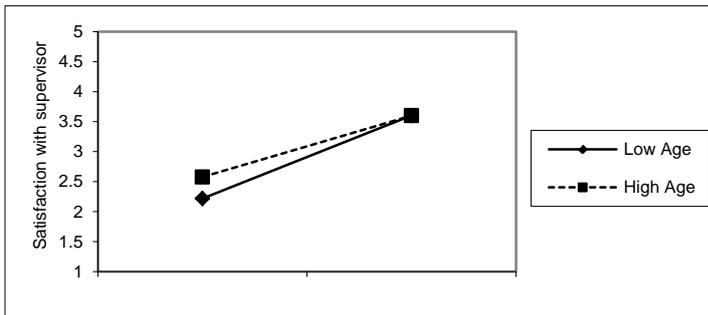


Figure 7.34: Interaction effects between age, congruency of supervisor and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

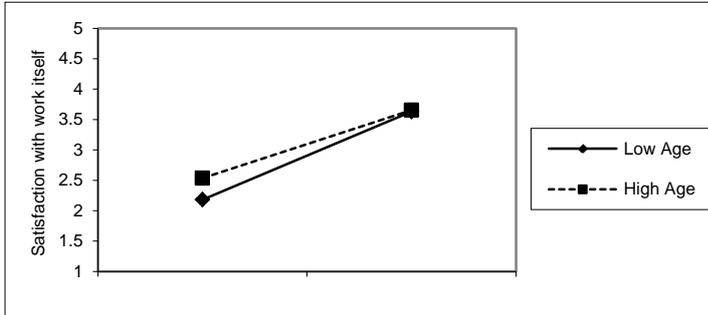


Figure 7.35: Interaction effects between age, congruency of supervisor and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

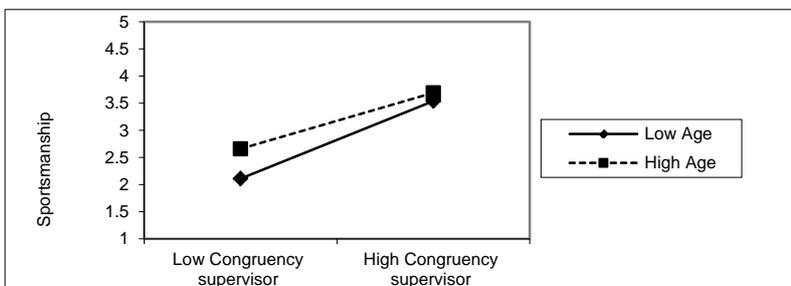


Figure 7.36: Interaction effects between age, congruency of supervisor and sportsmanship. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

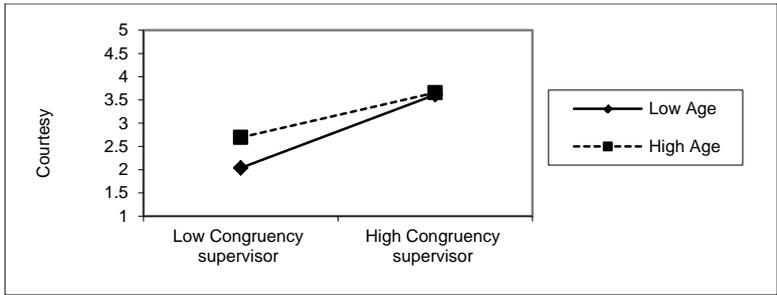


Figure 7.37: Interaction effects between age, congruency supervisor and courtesy Low Age =  $\leq 40$ ; High Age =  $\geq 40$

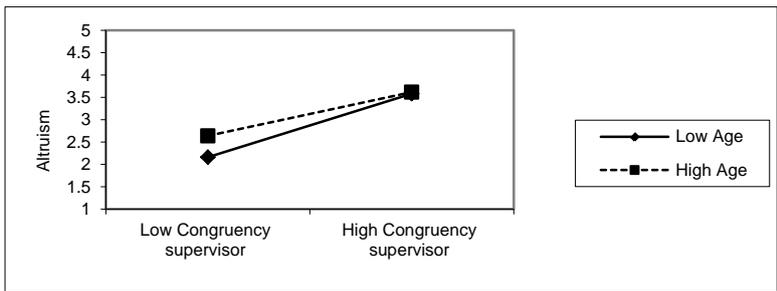


Figure 7.38: Interaction effects between age, congruency supervisor and altruism. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

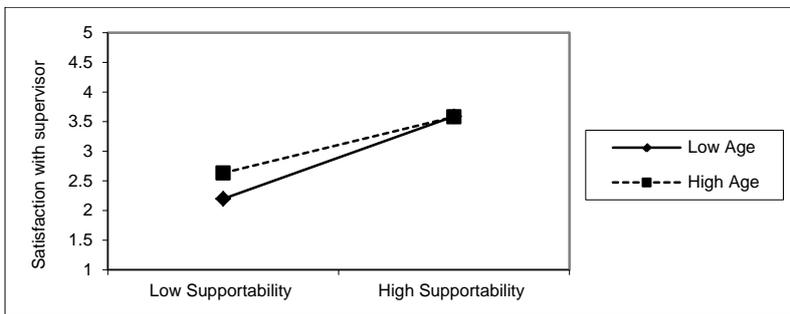


Figure 7.39: Interaction effects between age, supportability and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

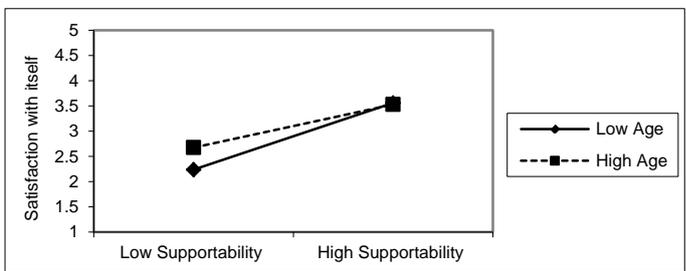


Figure 7.40: Interaction effects between age, supportability and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

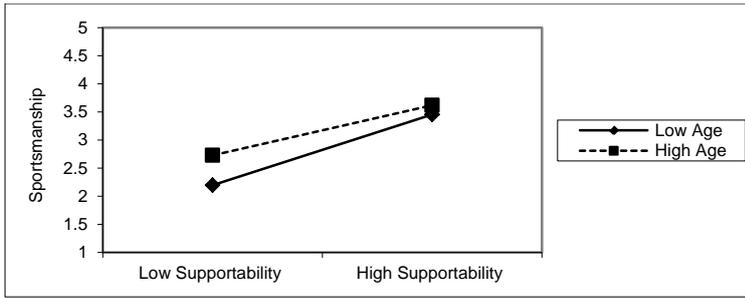


Figure 7.41: Interaction effects between age, supportability and sportsmanship.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

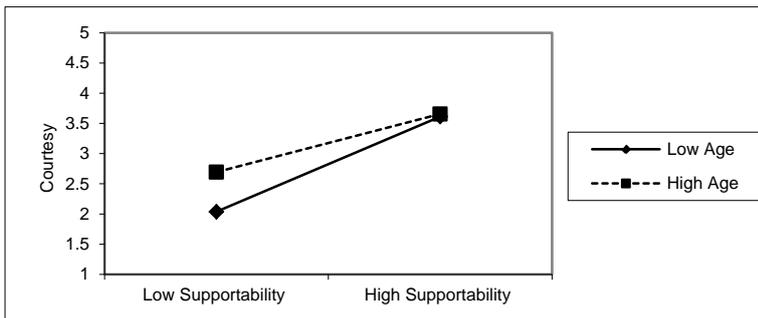


Figure 7.42: Interaction effects between age, supportability and courtesy.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

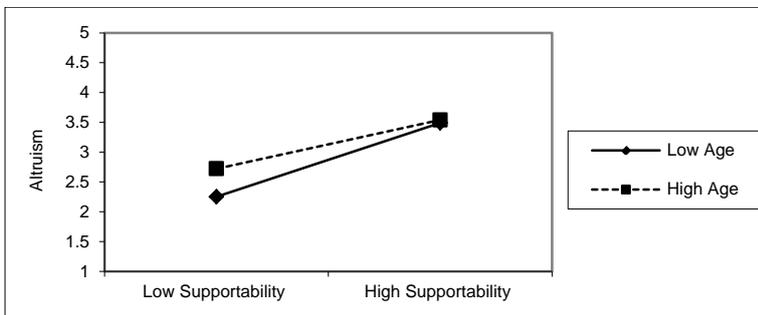


Figure 7.43: Interaction effects between age, supportability and altruism.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

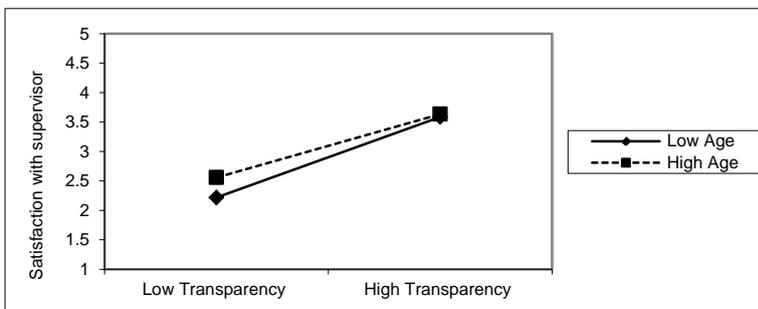


Figure 7.44: Interaction effects between age, transparency and satisfaction with supervisor.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

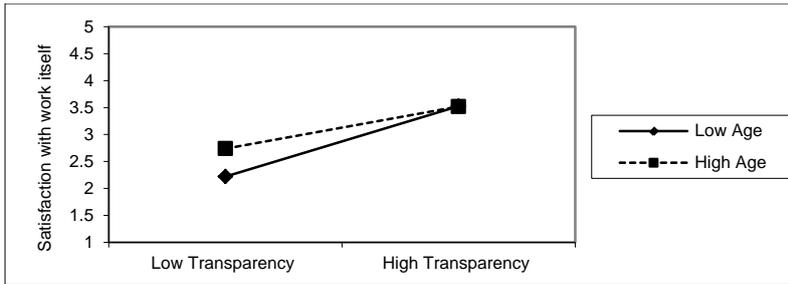


Figure 7.45: Interaction effects between age, transparency and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

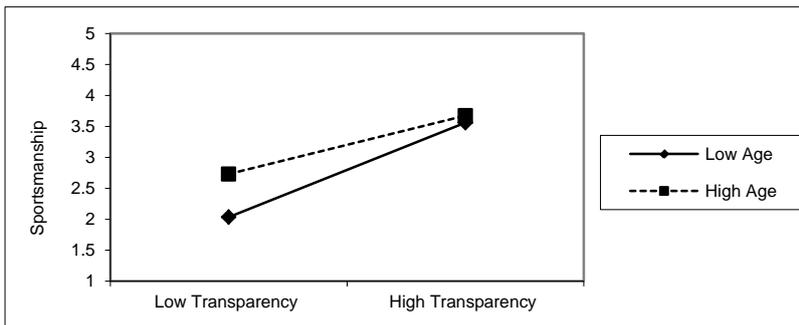


Figure 7.46: Interaction effects between age, transparency and sportsmanship. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

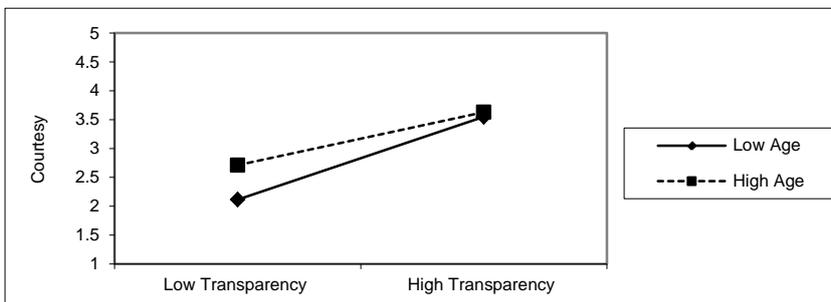


Figure 7.47: Interaction effects between age, transparency and courtesy. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

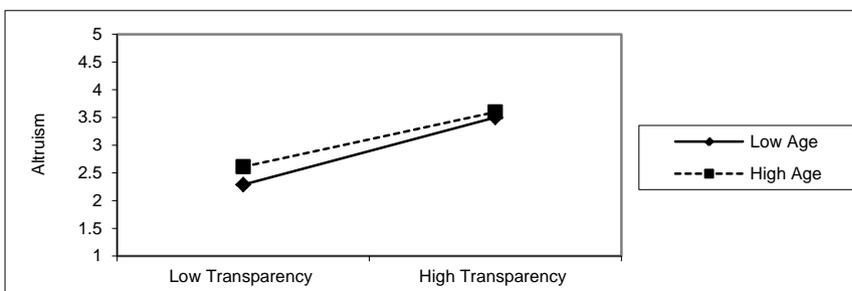


Figure 7.48: Interaction effects between age, transparency and altruism. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

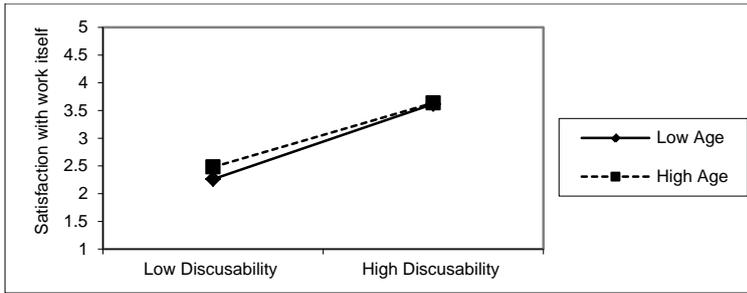


Figure 7.49: Interaction effects between age, discussability and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

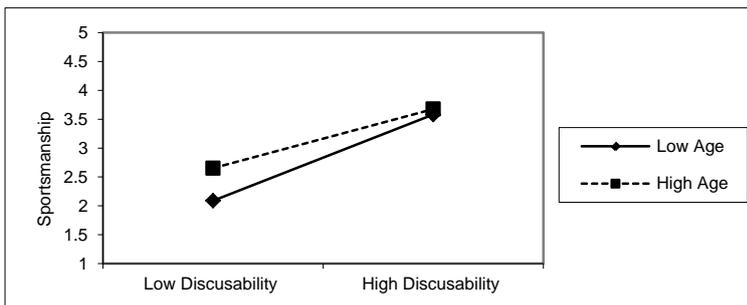


Figure 7.50: Interaction effects between age, discussability and sportsmanship. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

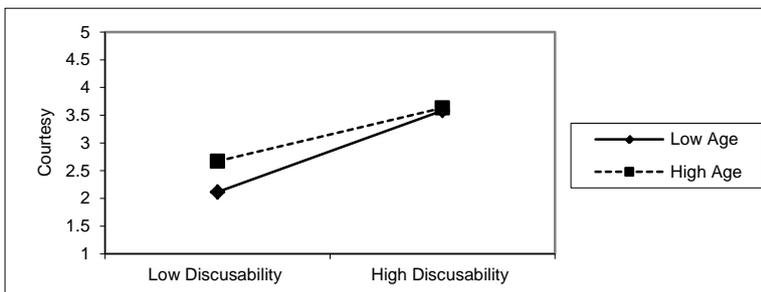


Figure 7.51: Interaction effects between age, discussability and courtesy. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

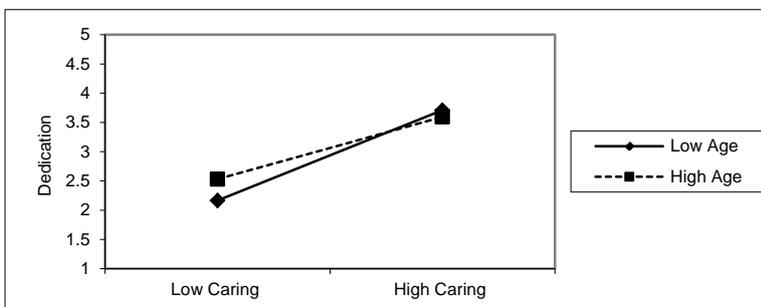


Figure 7.52: Interaction effects between age, caring and dedication. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

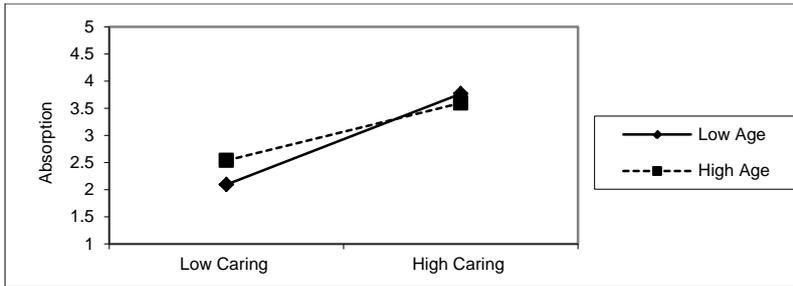


Figure 7.53: Interaction effects between age, caring and absorption.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

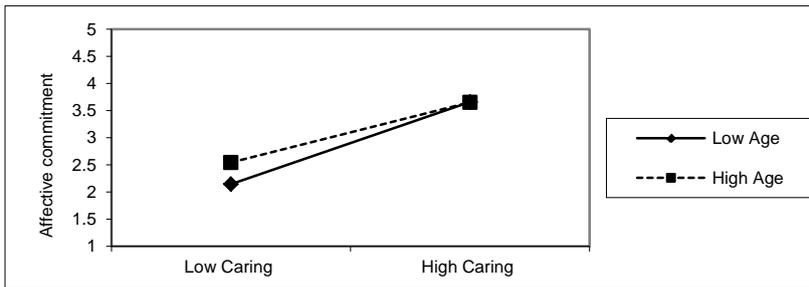


Figure 7.54: Interaction effects between age, caring and affective commitment.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

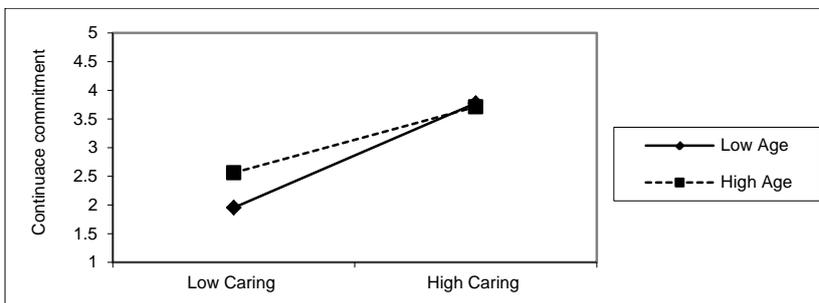


Figure 7.55: Interaction effects between age, caring and continuance commitment.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

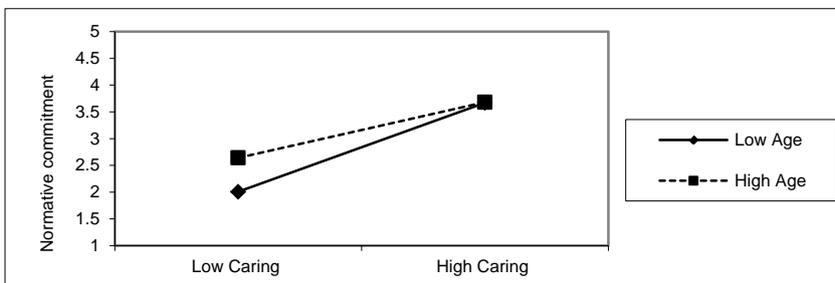


Figure 7.56: Interaction effects between age, caring and normative commitment.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

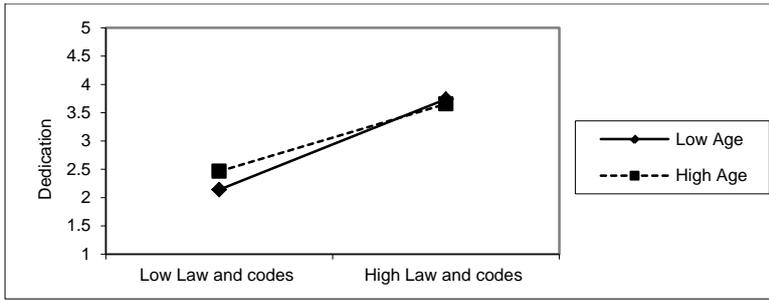


Figure 7.57: Interaction effects between age, law and code and dedication.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

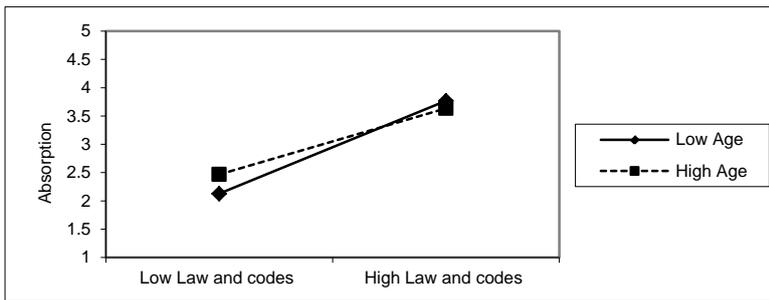


Figure 7.58: Interaction effects between age, law and code and absorption.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

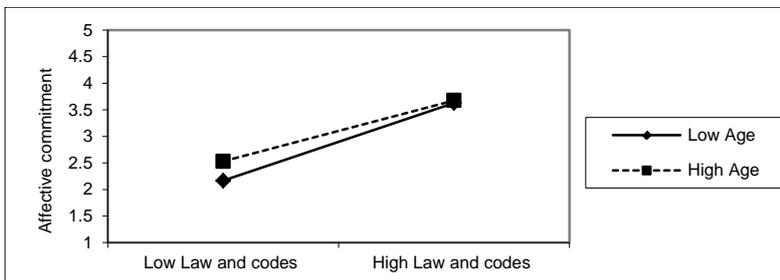


Figure 7.59: Interaction effects between age, law and code and affective commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

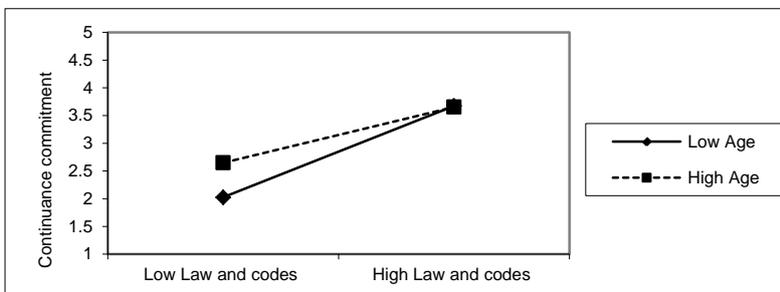


Figure 7.60: Interaction effects between age, law and code and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

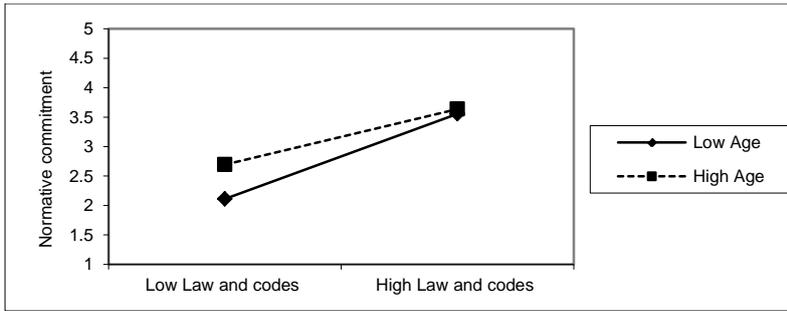


Figure 7.61: Interaction effects between age, law and code and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

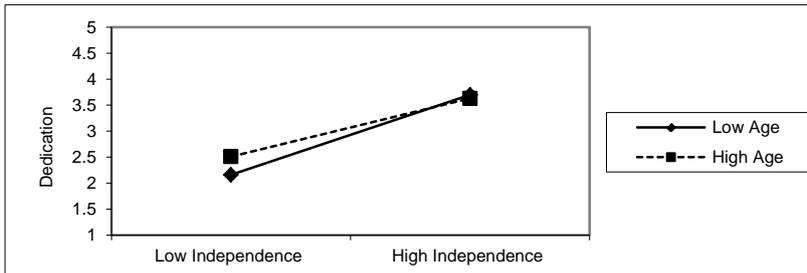


Figure 7.62: Interaction effects between age, independence and dedication. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

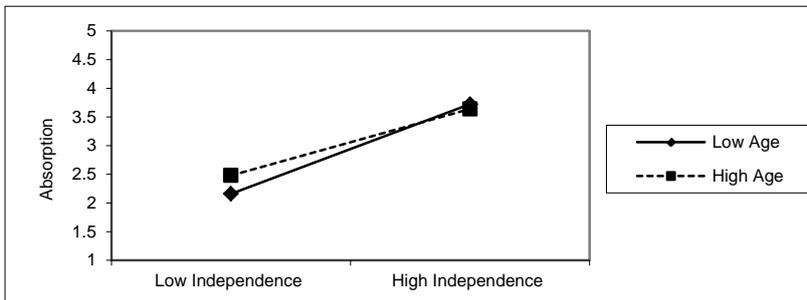


Figure 7.63: Interaction effects between age, independence and absorption. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

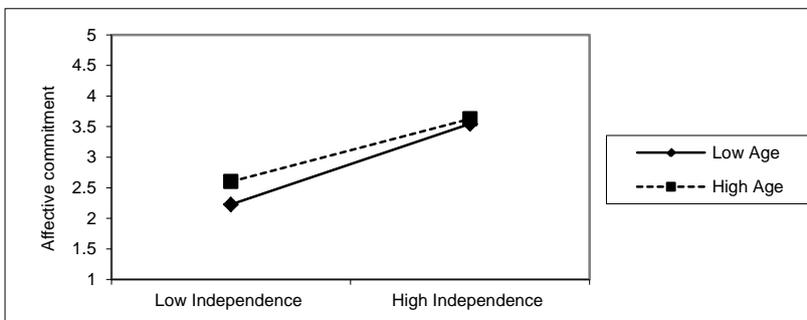


Figure 7.64: Interaction effects between age, independence and affective commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

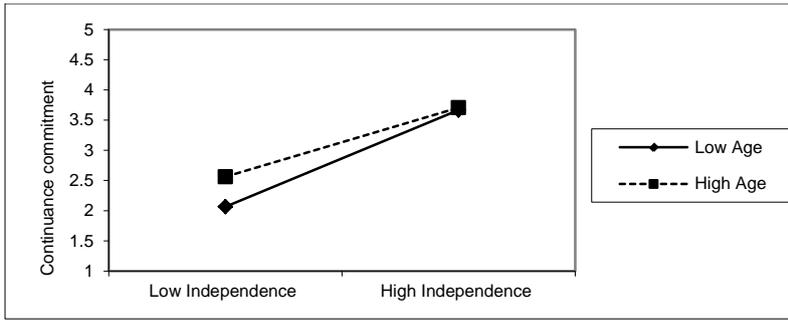


Figure 7.65: Interaction effects between age, independence and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

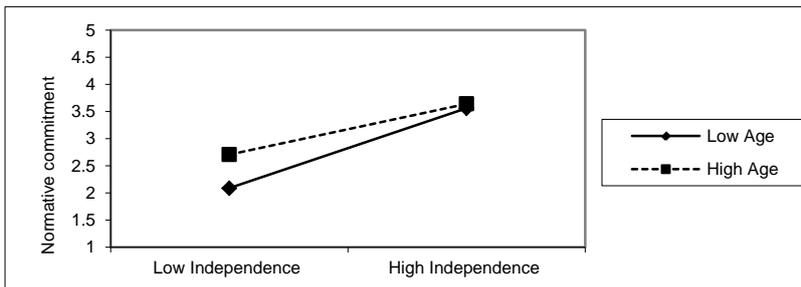


Figure 7.66: Interaction effects between age, independence and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

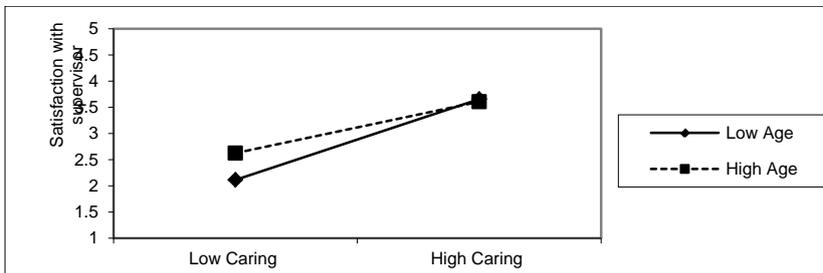


Figure 7.67: Interaction effects between age, caring and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

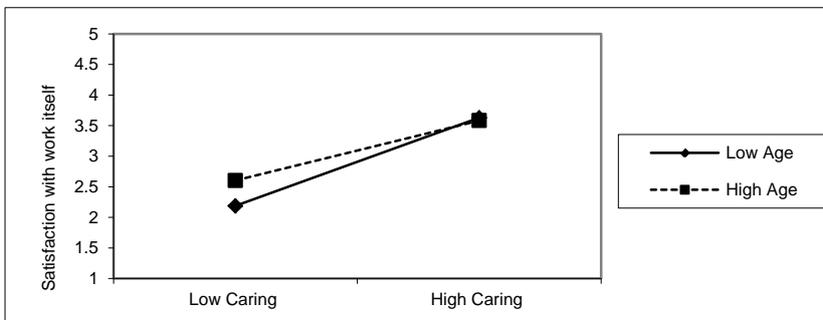


Figure 7.68: Interaction effects between age, caring and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

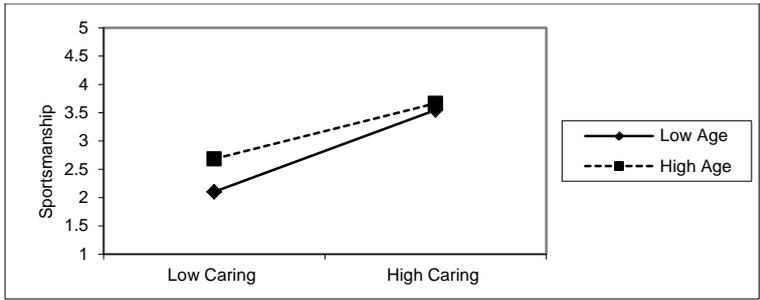


Figure 7.69: Interaction effects between age, caring and sportsmanship.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

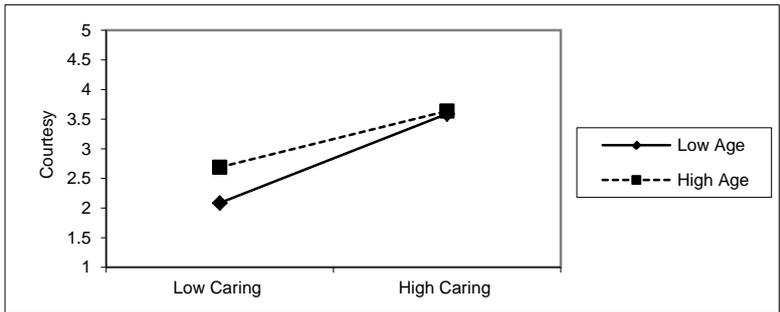


Figure 7.70: Interaction effects between age, caring and courtesy.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

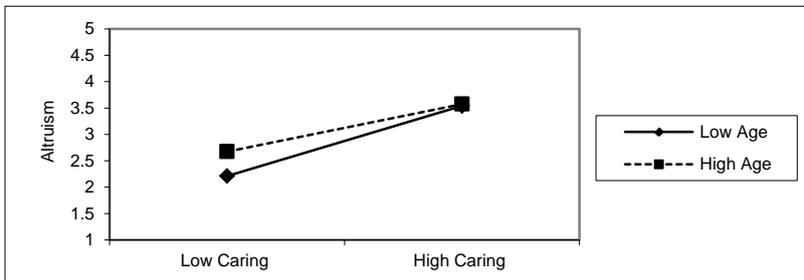


Figure 7.71: Interaction effects between age, caring and altruism.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

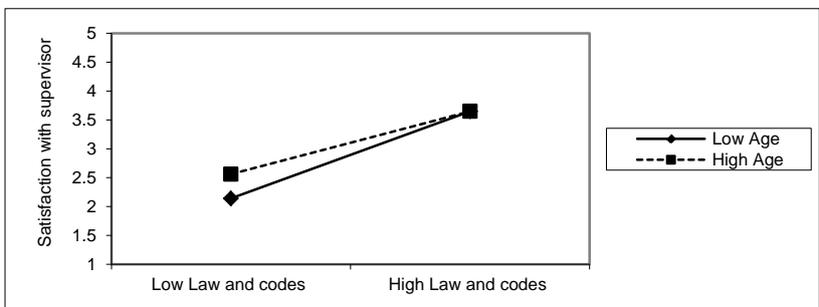


Figure 7.72: Interaction effects between age, law and codes and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

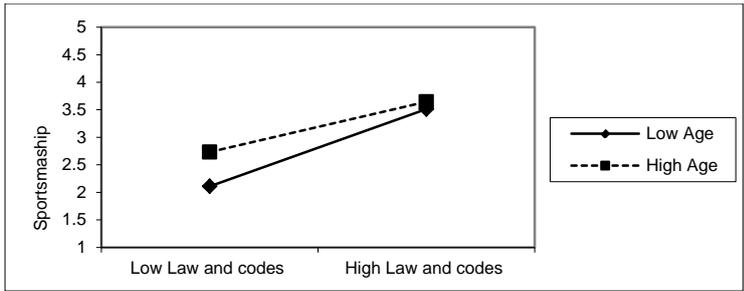


Figure 7.73: Interaction effects between age, law and codes and sportsmanship.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

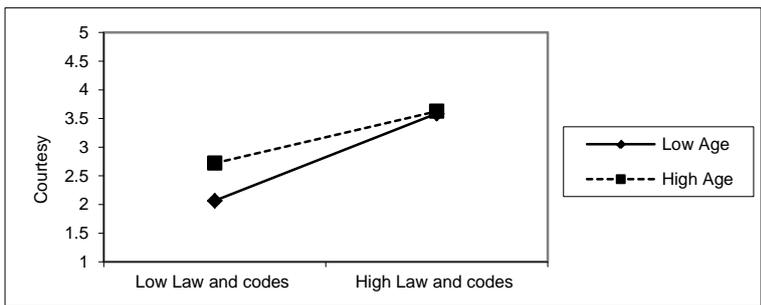


Figure 7.74: Interaction effects between age, law and codes and courtesy.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

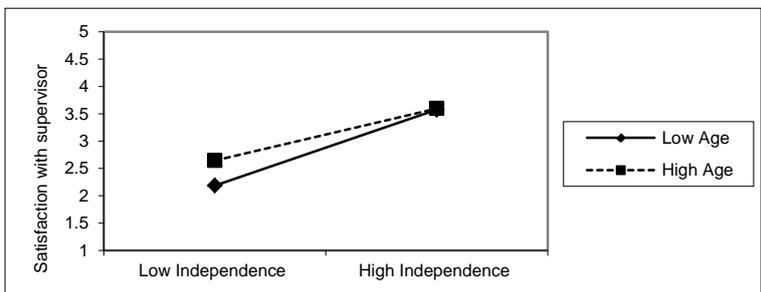


Figure 7.75: Interaction effects between age, independence and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

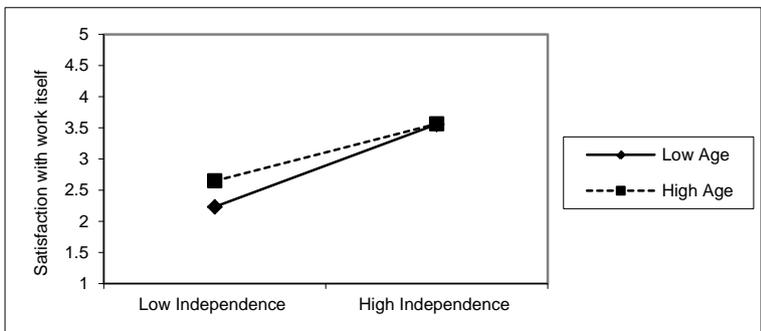


Figure 7.76: Interaction effects between age, independence and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

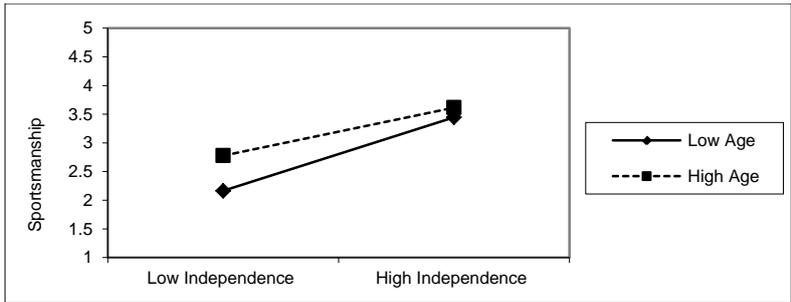


Figure 7.77: Interaction effects between age, independence and sportsmanship.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

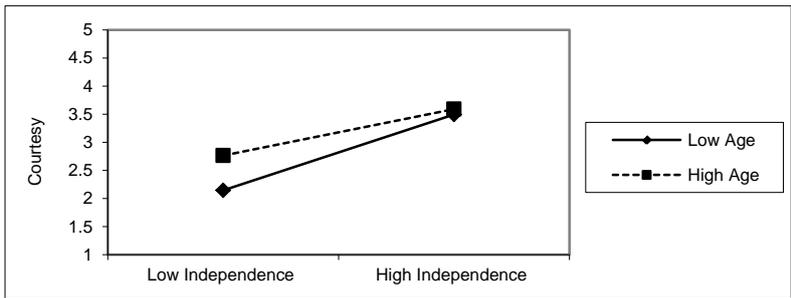


Figure 7.78: Interaction effects between age, independence and courtesy.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

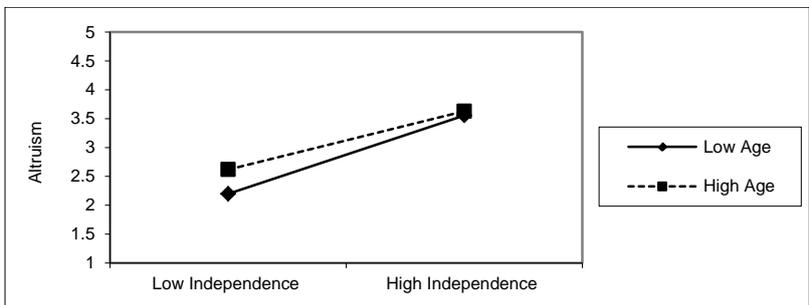


Figure 7.79: Interaction effects between age, independence and altruism.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

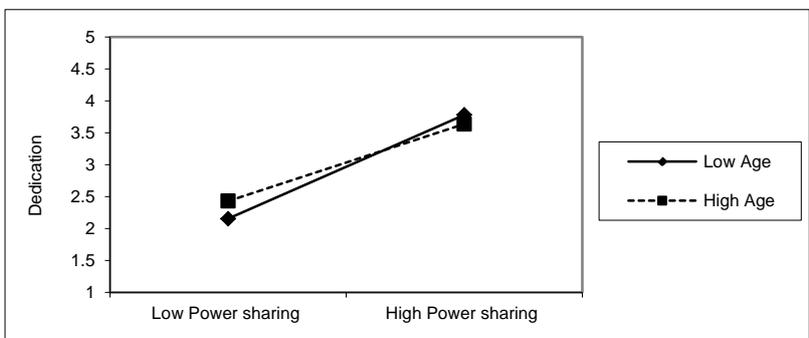


Figure 7.80: Interaction effects between age, power sharing and dedication.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

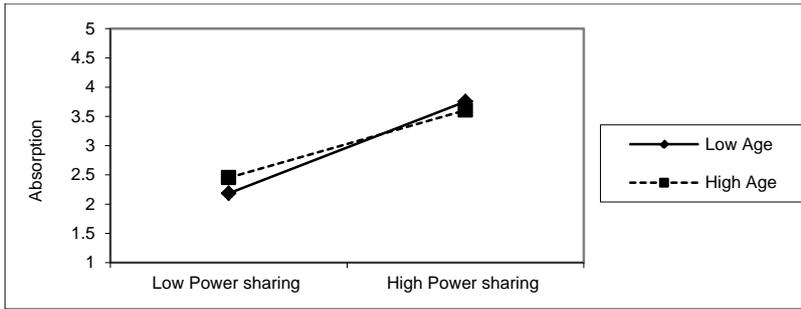


Figure 7.81: Interaction effects between a ge, power sharing and absorption.

Low Age =  $\leq 40$ ; High Age =  $\geq 40$

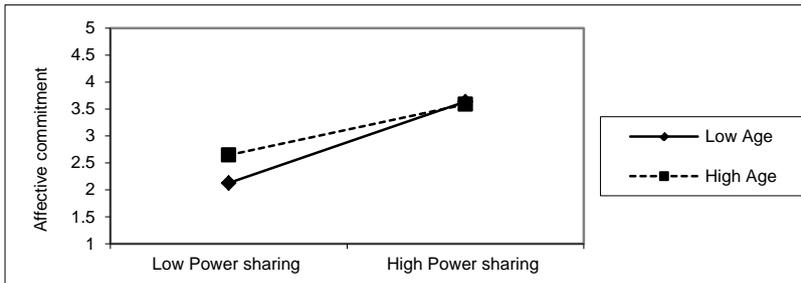


Figure 7.82: Interaction effects between age, power sharing and affective commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

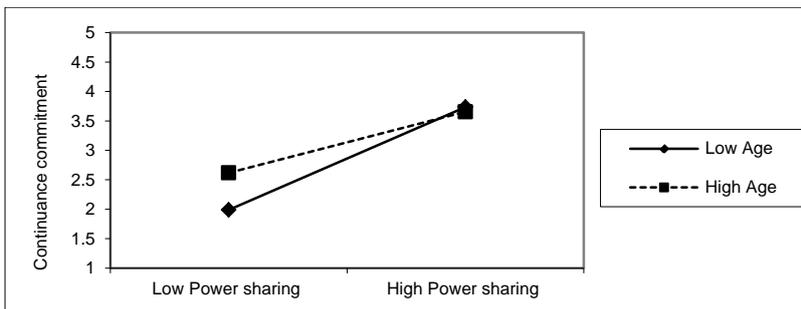


Figure 7.83: Interaction effects between age, power sharing and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

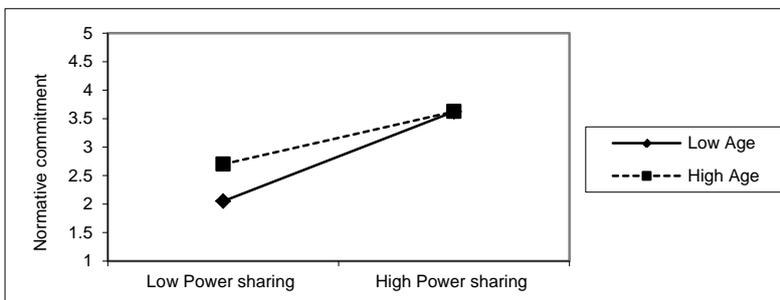


Figure 7.84: Interaction effects between age, power sharing and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

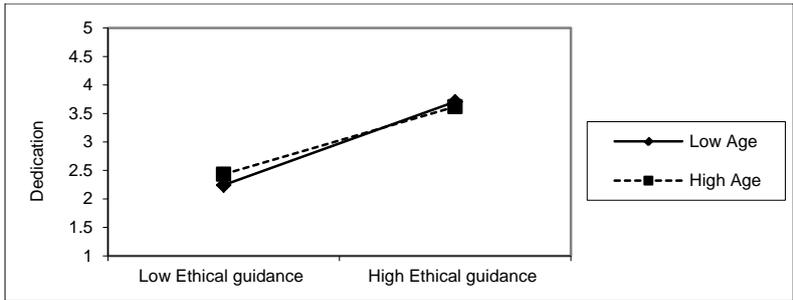


Figure 7.85: Interaction effects between age, ethical guidance and dedication. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

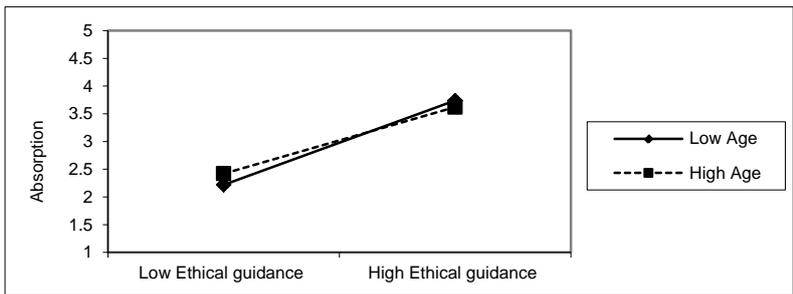


Figure 7.86: Interaction effects between age, ethical guidance and absorption. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

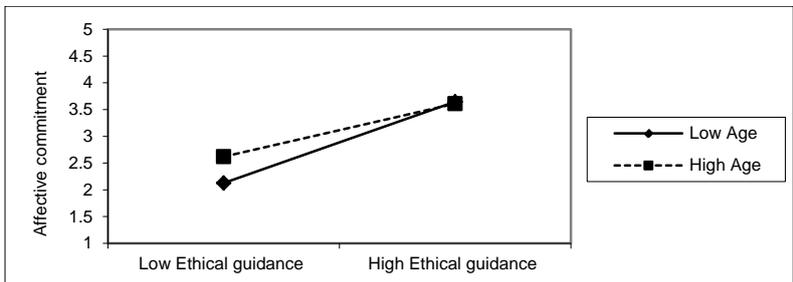


Figure 7.87: Interaction effects between age, ethical guidance and affective commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

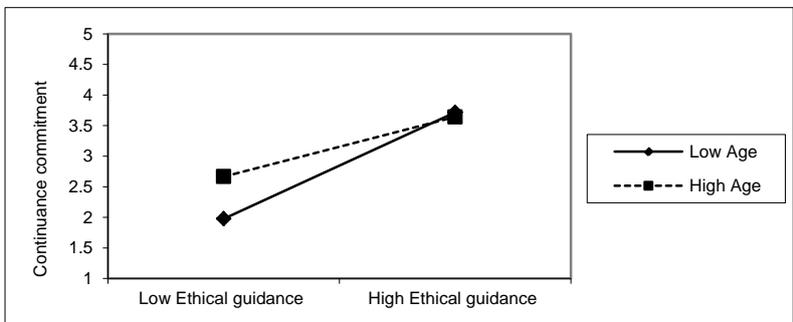


Figure 7.88: Interaction effects between age, ethical guidance and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

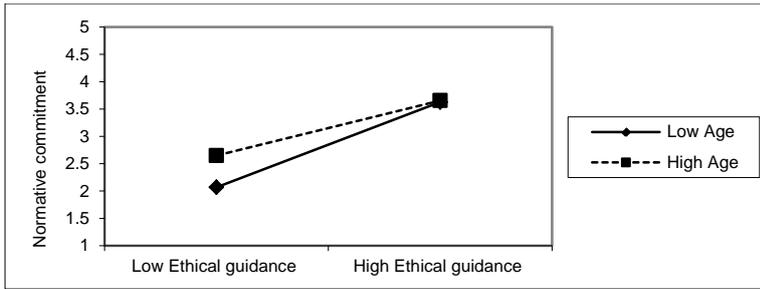


Figure 7.89: Interaction effects between age, ethical guidance and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

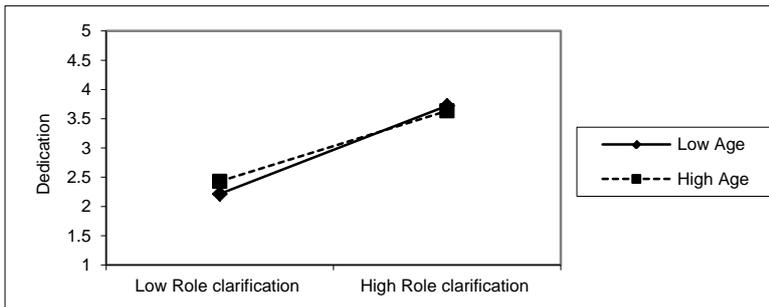


Figure 7.90: Interaction effects between age, role clarification and dedication. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

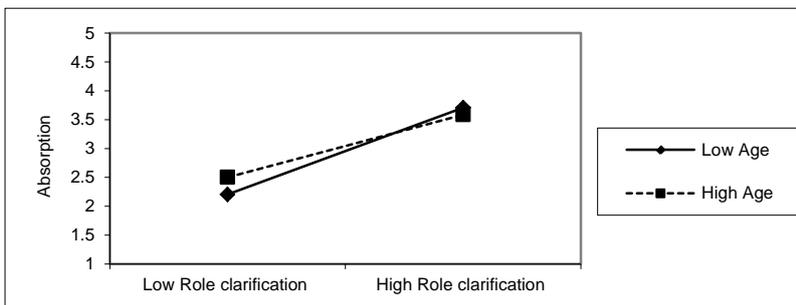


Figure 7.91: Interaction effects between age, role clarification and absorption. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

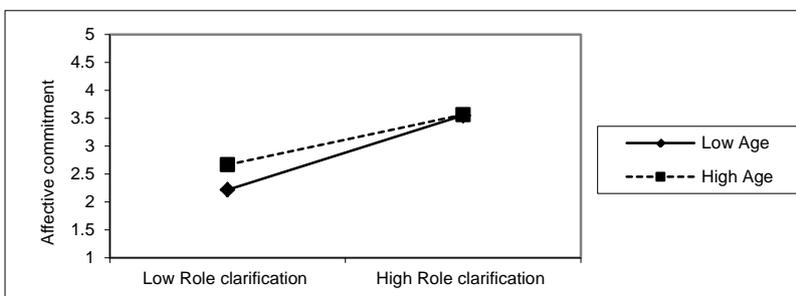


Figure 7.92: Interaction effects between age, role clarification and affective commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

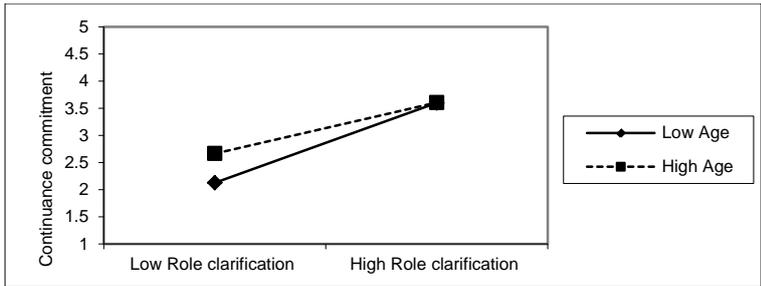


Figure 7.93: Interaction effects between age, role clarification and continuance commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

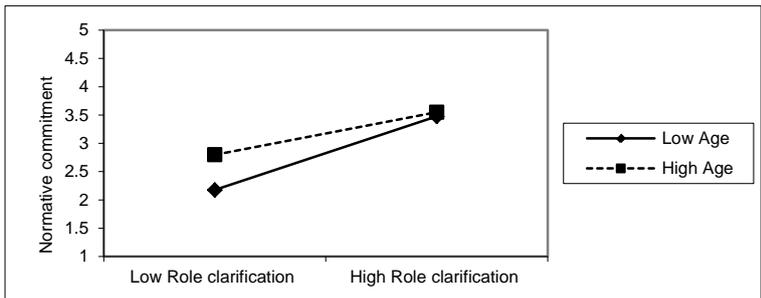


Figure 7.94: Interaction effects between age, role clarification and normative commitment. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

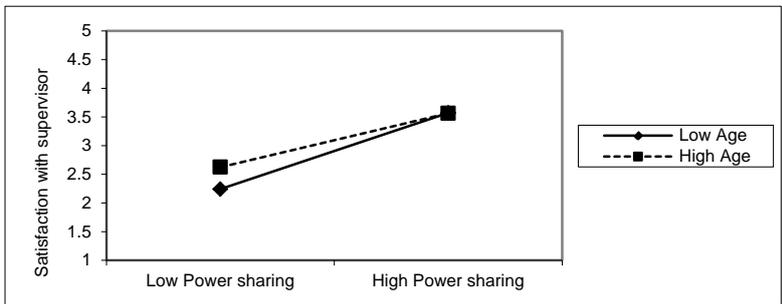


Figure 7.95: Interaction effects between age, power sharing and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

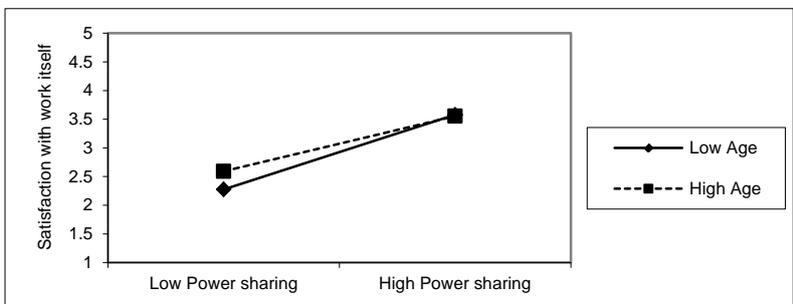


Figure 7.96: Interaction effects between age, power sharing and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

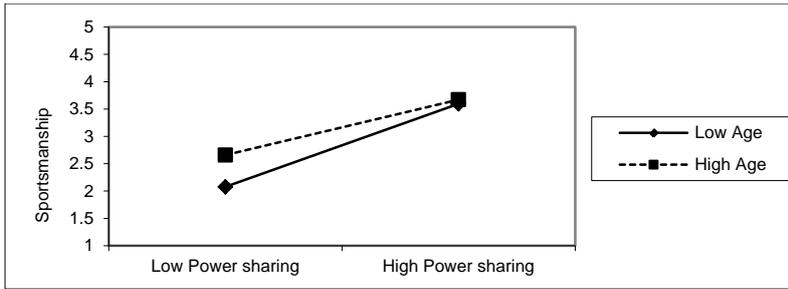


Figure 7.97: Interaction effects between age, power sharing and sportsmanship.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

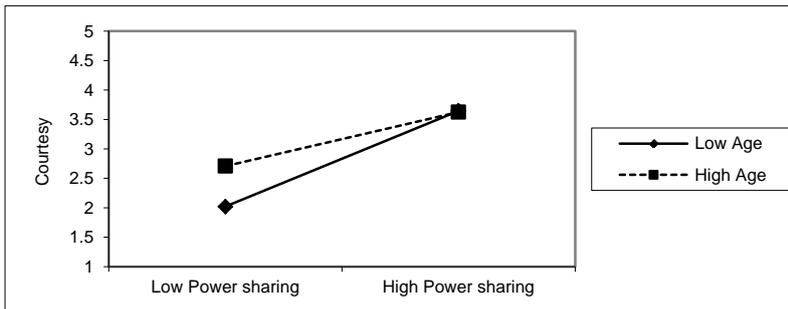


Figure 7.98: Interaction effects between age, power sharing and courtesy.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

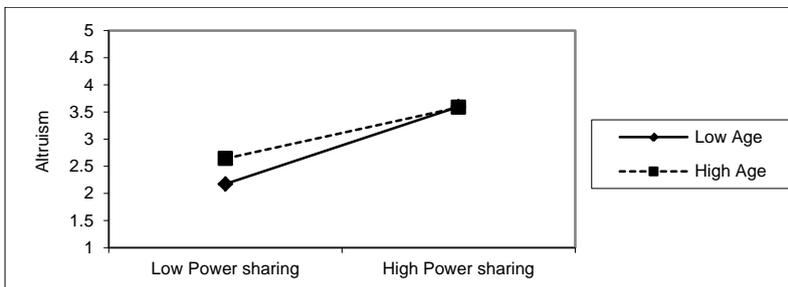


Figure 7.99: Interaction effects between age, power sharing and altruism.  
 Low Age =  $\leq 40$ ; High Age =  $\geq 40$

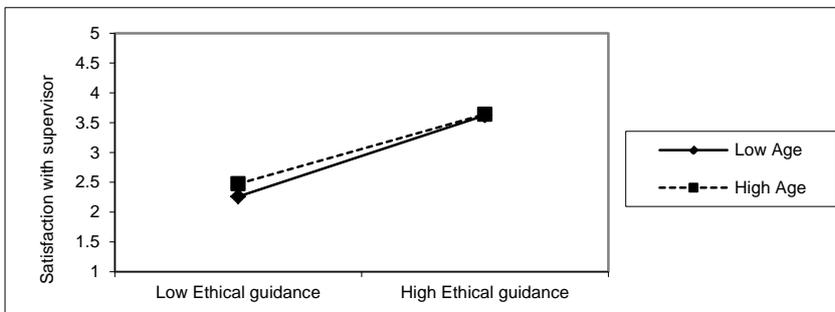


Figure 7.100: Interaction effects between age, ethical guidance and satisfaction with supervisor. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

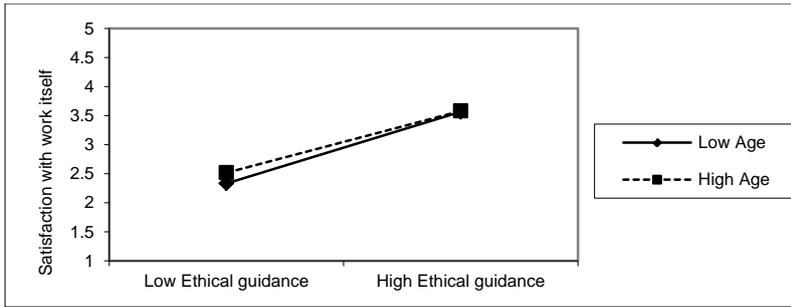


Figure 7.101: Interaction effects between age, ethical guidance and satisfaction with work itself. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

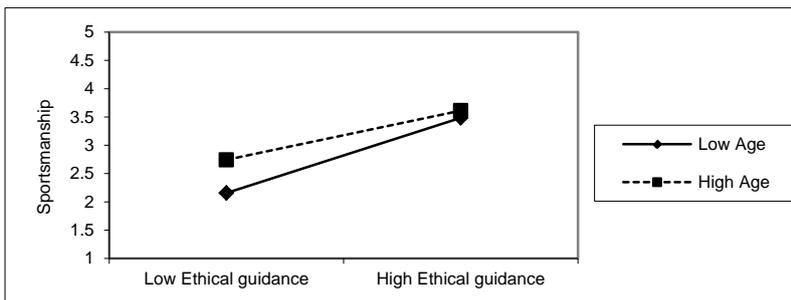


Figure 7.102: Interaction effects between age, ethical guidance and sportsmanship. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

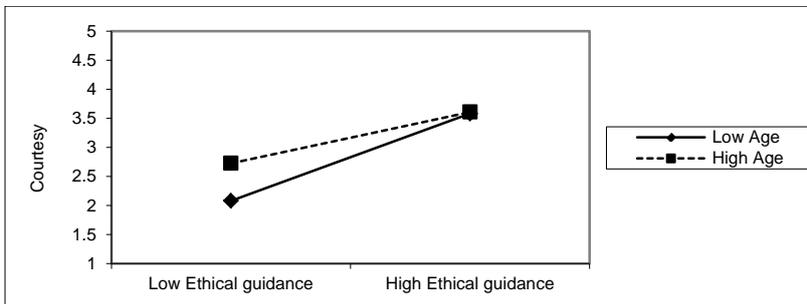


Figure 7.103: Interaction effects between age, ethical guidance and courtesy. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

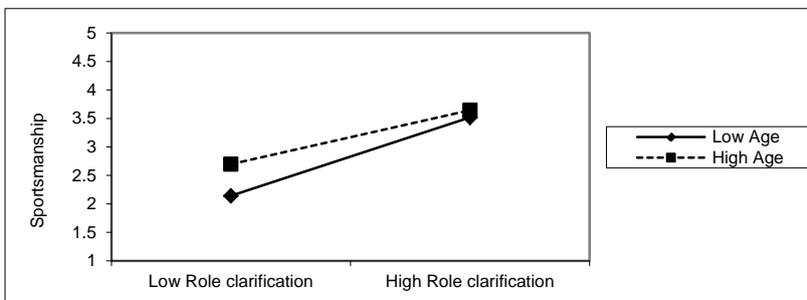


Figure 7.104: Interaction effects between age, role clarification and sportsmanship. Low Age =  $\leq 40$ ; High Age =  $\geq 40$

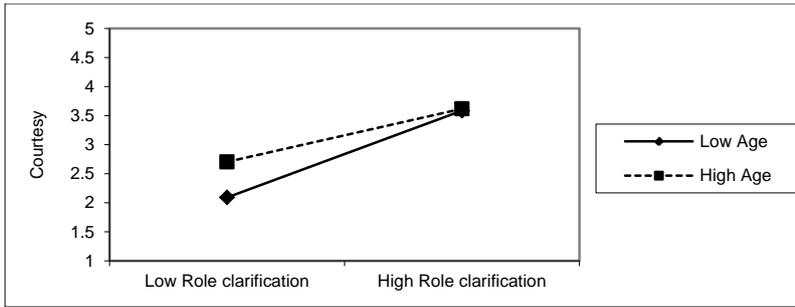


Figure 7.105: Interaction effects between age, role clarification and courtesy.  
 Low Age = ≤ 40; High Age = ≥ 40

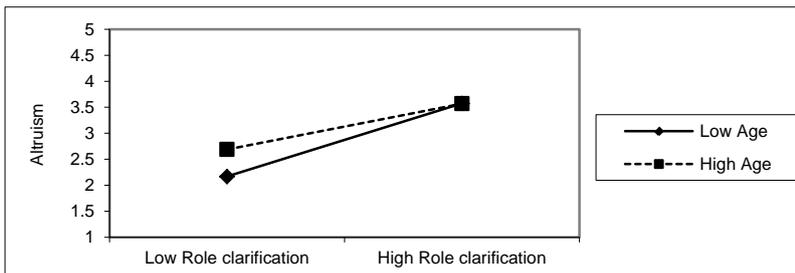


Figure 7.106: Interaction effects between age, role clarification and altruism.  
 Low Age = ≤ 40; High Age = ≥ 40

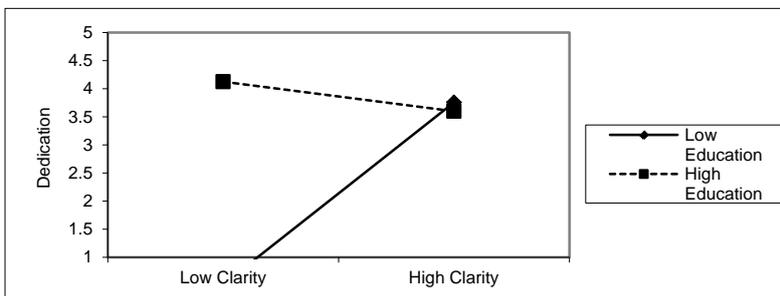


Figure 7.107: Interaction effects between education, clarity and dedication.  
 Low Education = ≤ 4; High Education = ≥ 5

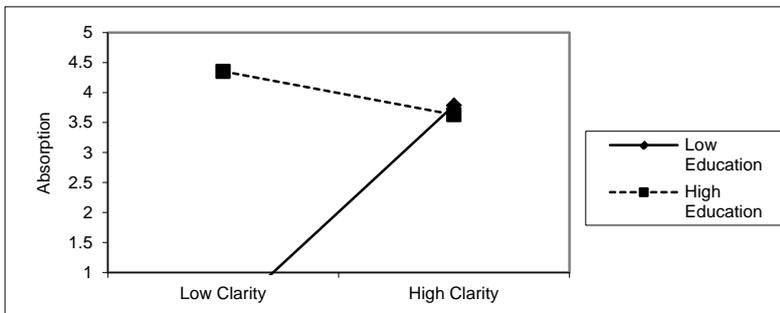


Figure 7.108: Interaction effects between education, clarity and absorption.  
 Low Education = ≤ 4; High Education = ≥ 5

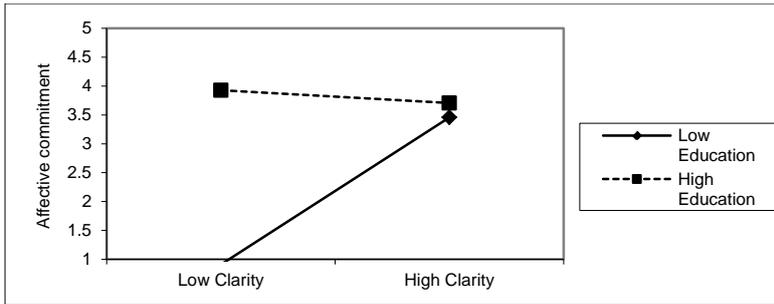


Figure 7.109: Interaction effects between education, clarity and affective commitment.

Low Education =  $\leq 4$ ; High Education =  $\geq 5$

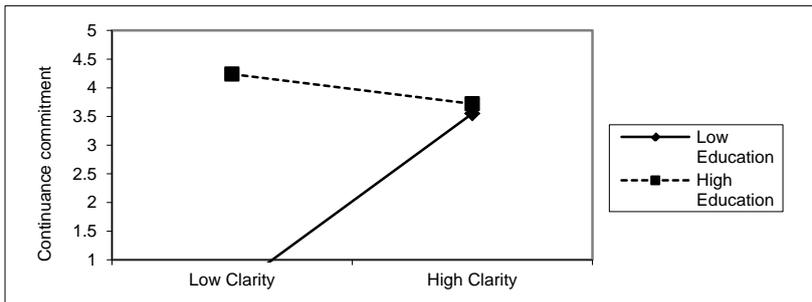


Figure 7.110: Interaction effects between education, clarity and continuance commitment. Low

Education =  $\leq 4$ ; High Education =  $\geq 5$

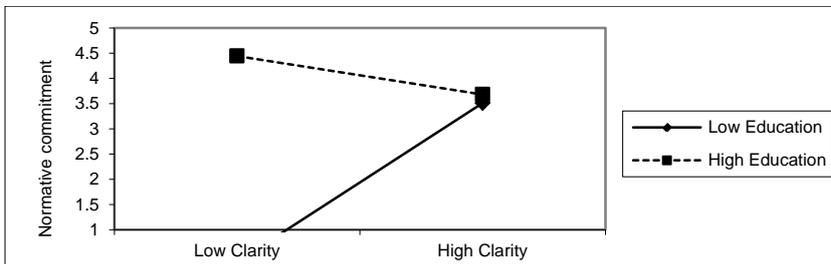


Figure 7.111: Interaction effects between education, clarity and normative commitment. Low

Education =  $\leq 4$ ; High Education =  $\geq 5$

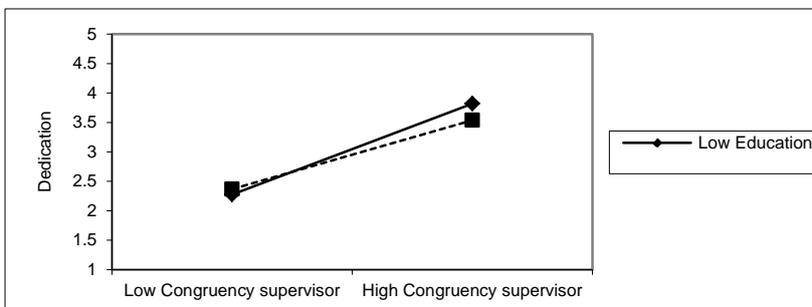


Figure 7.112: Interaction effects between education, congruency supervisor and dedication. Low

Education =  $\leq 4$ ; High Education =  $\geq 5$

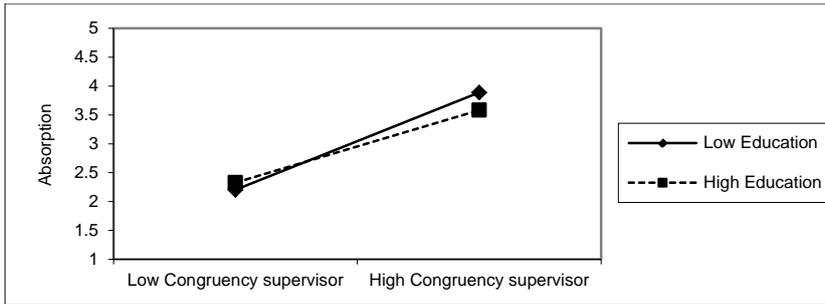


Figure 7.113: Interaction effects between education, congruency supervisor and absorption. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

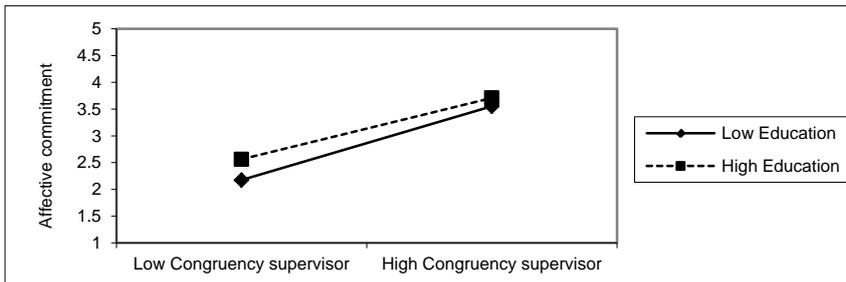


Figure 7.114: Interaction effects between education, congruency supervisor and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

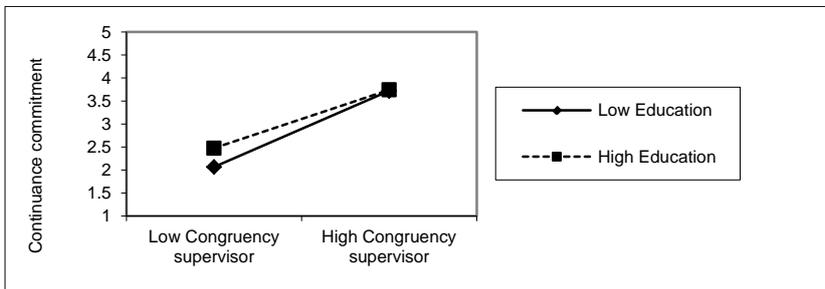


Figure 7.115: Interaction effects between education, congruency supervisor and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

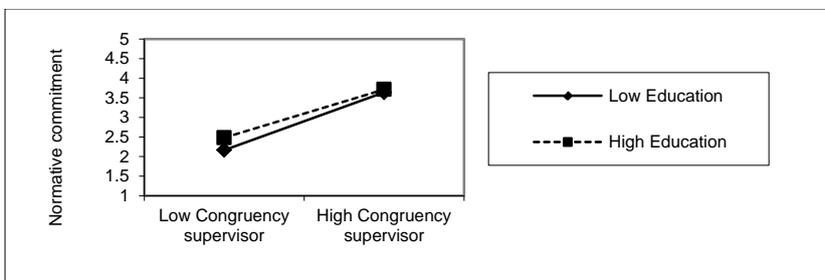


Figure 7.116: Interaction effects between education, congruency supervisor and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

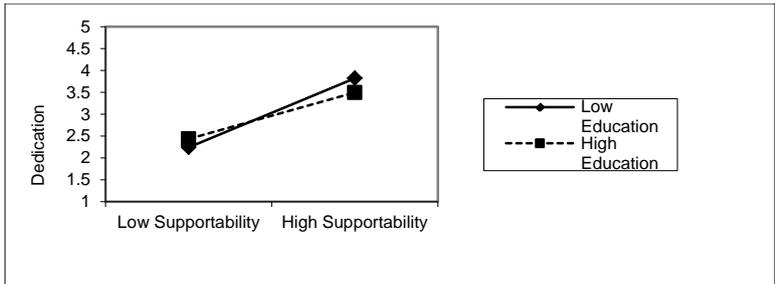


Figure 7.117: Interaction effects between education, supportability and dedication. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

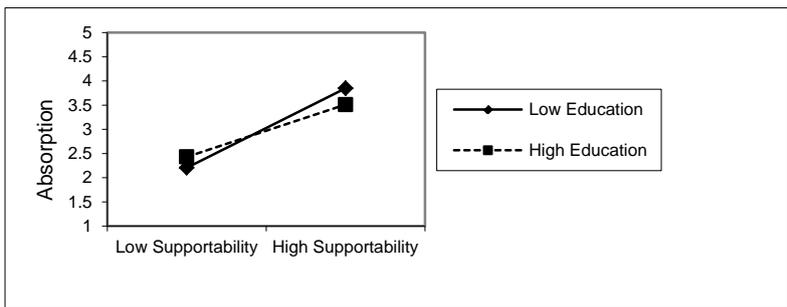


Figure 7.118: Interaction effects between education, supportability and absorption. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

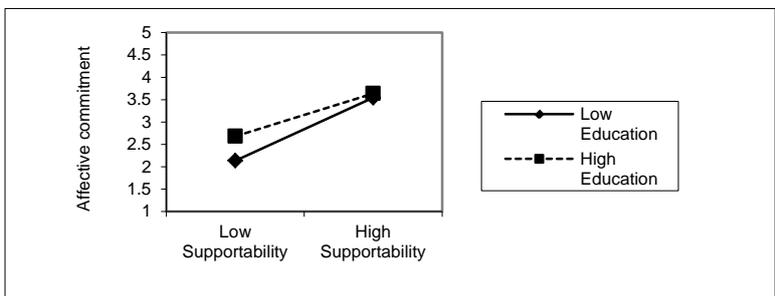


Figure 7.119: Interaction effects between education, supportability and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

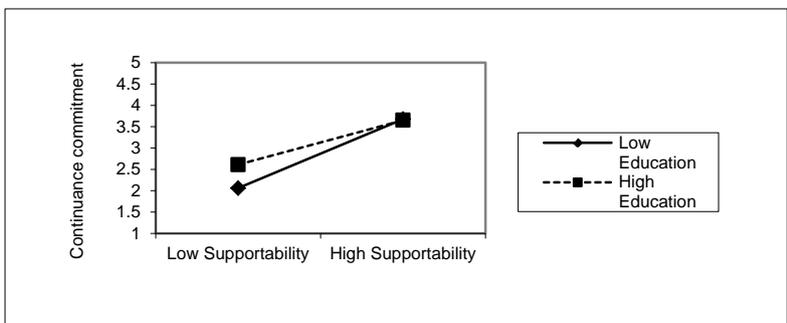


Figure 7.120: Interaction effects between education, supportability and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

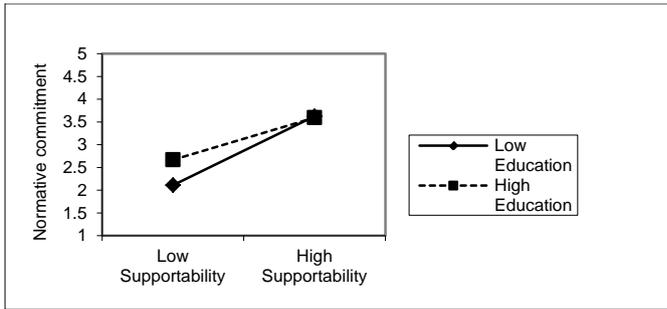


Figure 7.121: Interaction effects between education, supportability and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

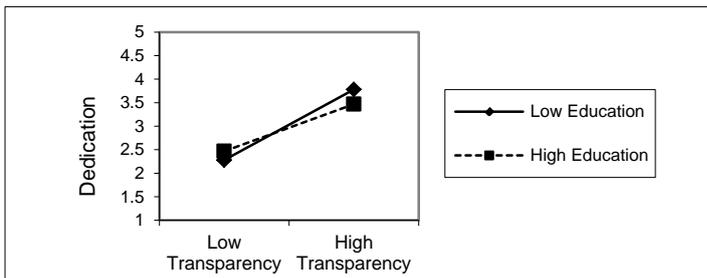


Figure 7.122: Interaction effects between education, transparency and dedication Low Education =  $\leq 4$ ; High Education =  $\geq 5$

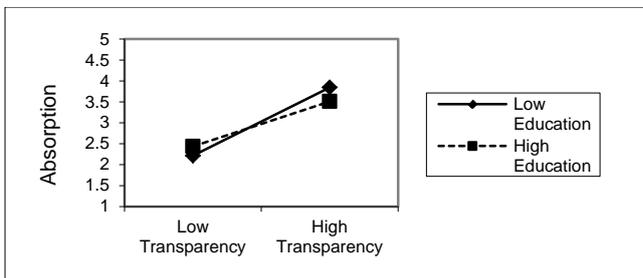


Figure 7.123: Interaction effects between education, transparency and absorption Low Education =  $\leq 4$ ; High Education =  $\geq 5$

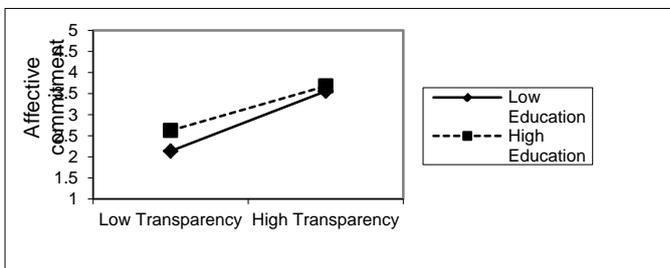


Figure 7.124: Interaction effects between education, transparency and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

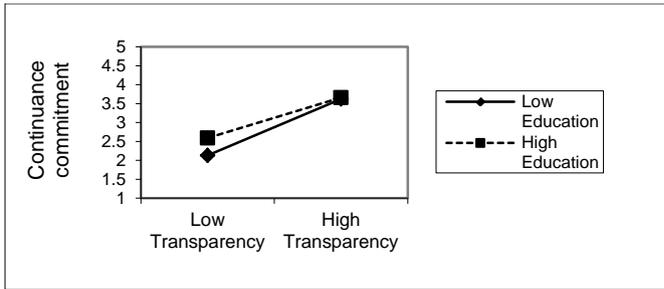


Figure 7.125: Interaction effects between education, transparency and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

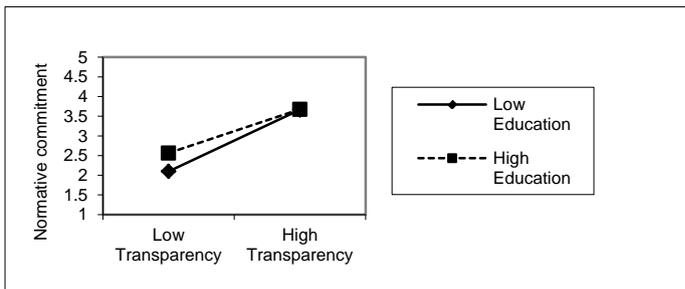


Figure 7.126: Interaction effects between education, transparency and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

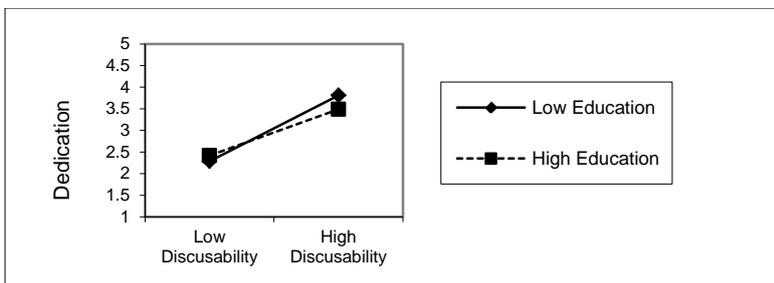


Figure 7.127: Interaction effects between education, discussability and dedication Low Education =  $\leq 4$ ; High Education =  $\geq 5$

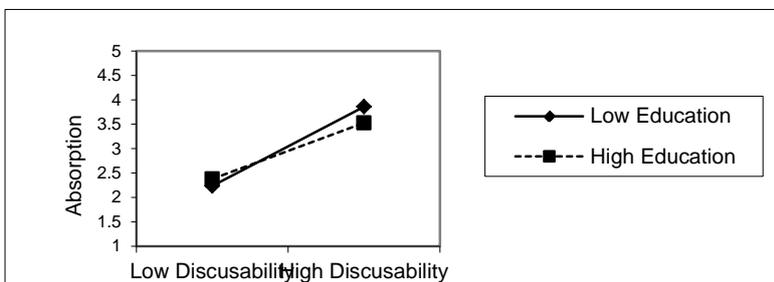


Figure 7.128: Interaction effects between education, discussability and absorption Low Education =  $\leq 4$ ; High Education =  $\geq 5$

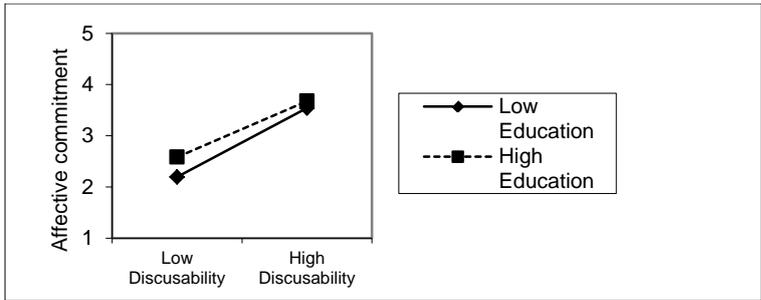


Figure 7.129: Interaction effects between education, discusability and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

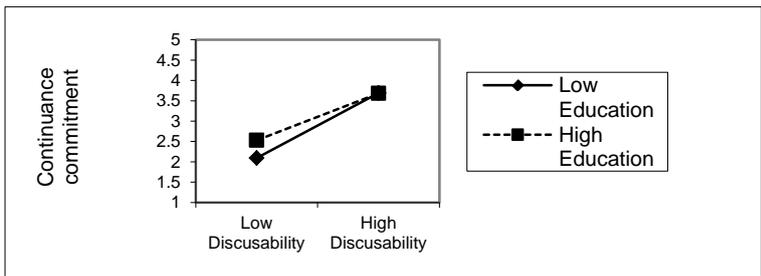


Figure 7.130: Interaction effects between education, discusability and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

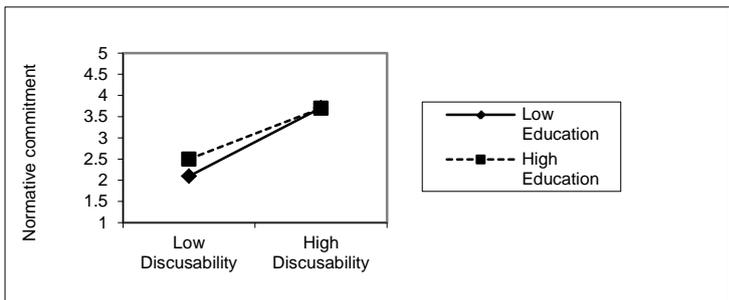


Figure 7.131: Interaction effects between education, discusability and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

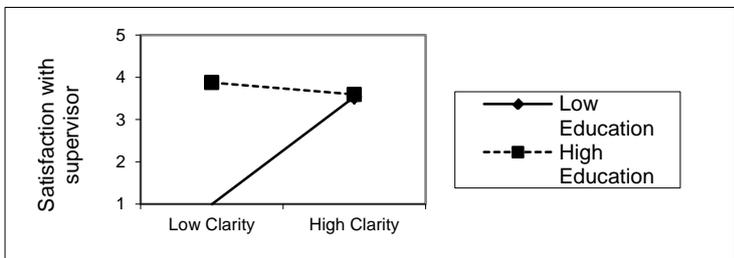


Figure 7.132: Interaction effects between education, clarity and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

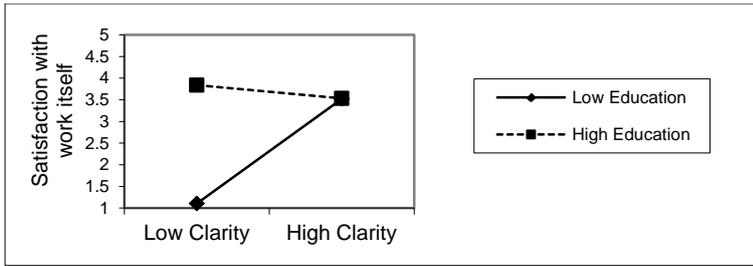


Figure 7.133: Interaction effects between education, clarity and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

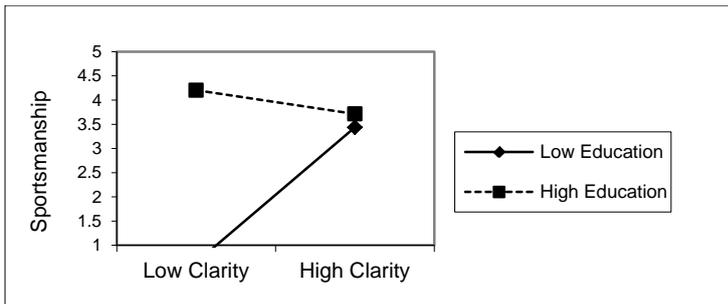


Figure 7.134: Interaction effects between education, clarity and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

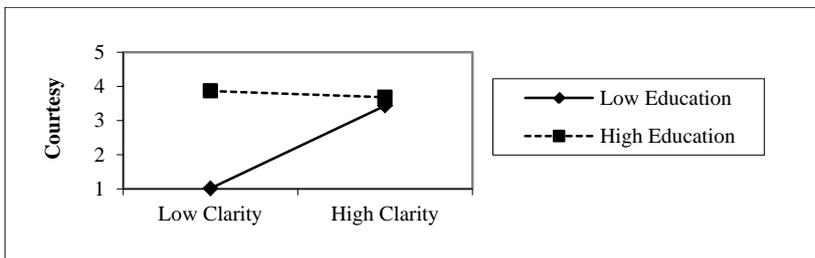


Figure 7.135: Interaction effects between education, clarity and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

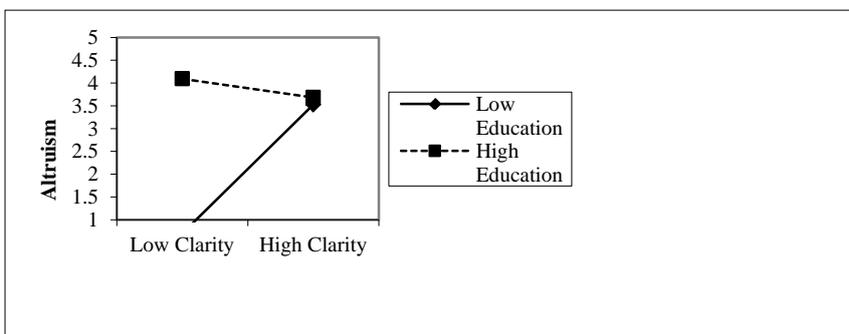


Figure 7.136: Interaction effects between education, clarity and altruism. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

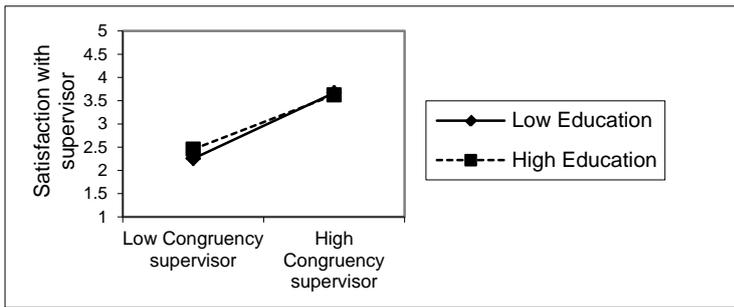


Figure 7.137: Interaction effects between education, congruency of supervisor and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

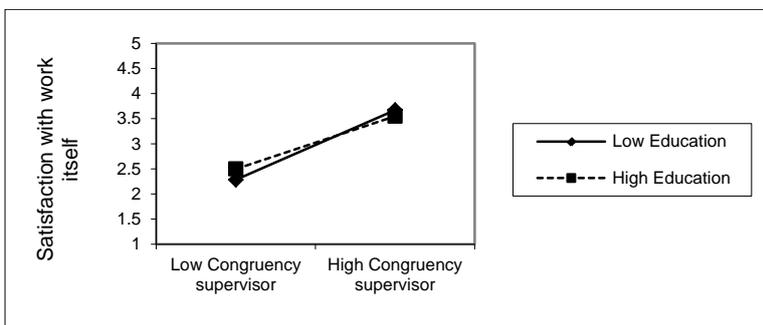


Figure 7.138: Interaction effects between education, congruency of supervisor and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

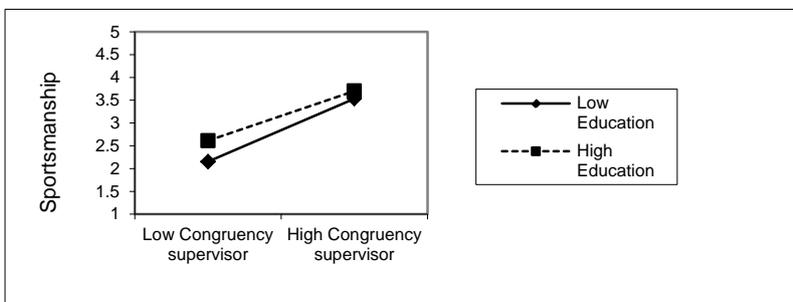


Figure 7.139: Interaction effects between education, congruency of supervisor and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

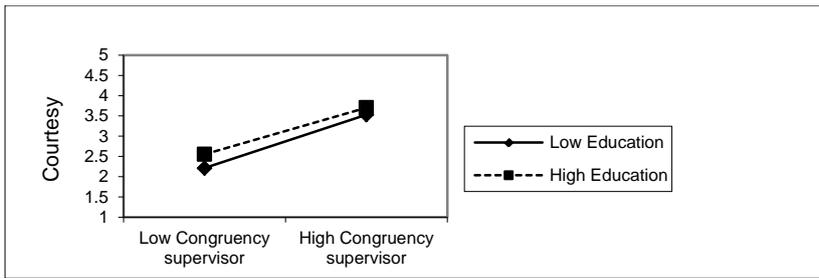


Figure 7.140: Interaction effects between education, congruency supervisor and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

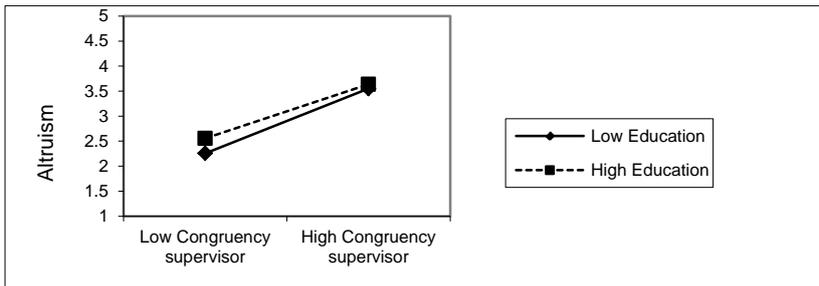


Figure 7.141: Interaction effects between education, congruency supervisor and altruism. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

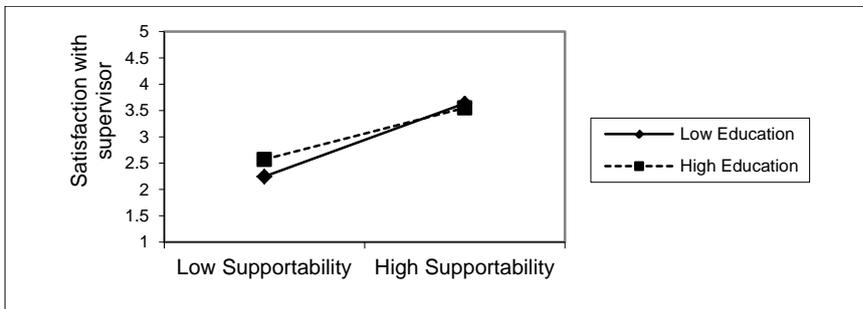


Figure 7.142: Interaction effects between education, supportability and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

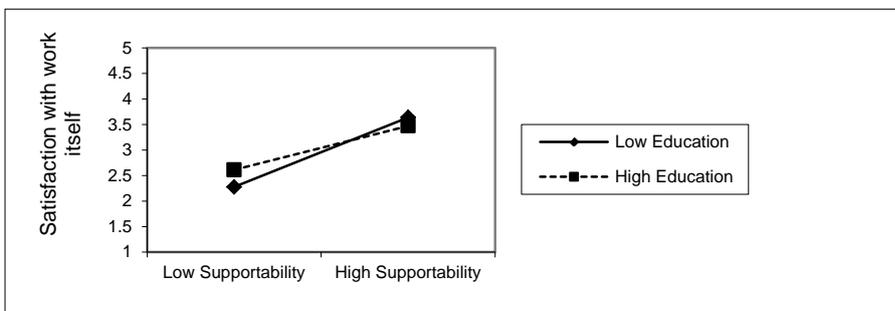


Figure 7.143: Interaction effects between education, supportability and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

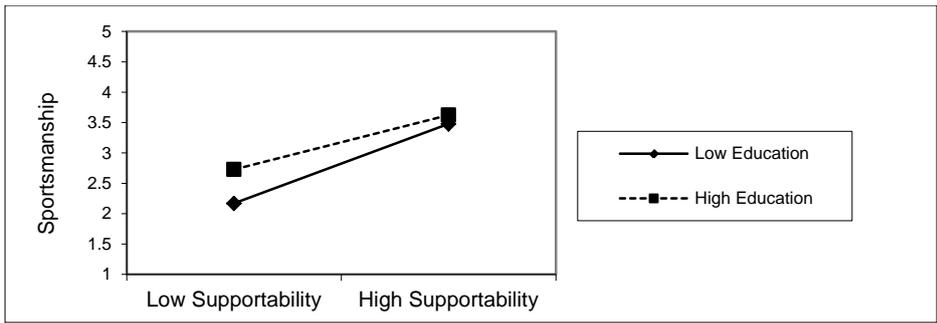


Figure 7.144: Interaction effects between education, supportability and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

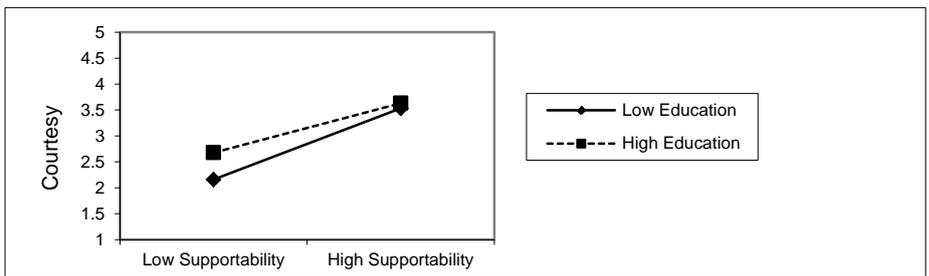


Figure 7.145: Interaction effects between education, supportability and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

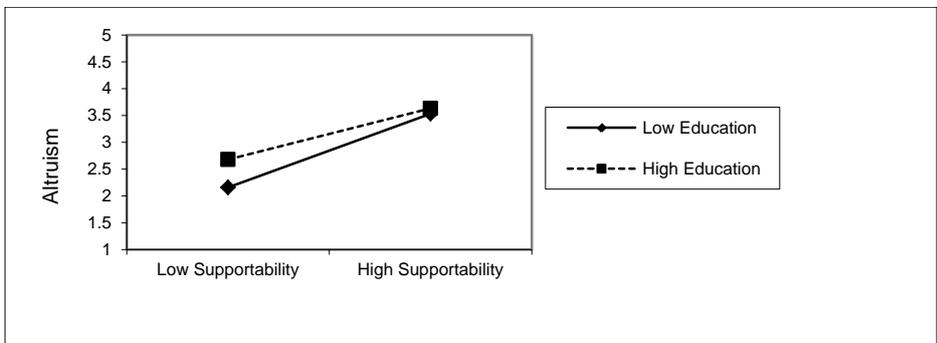


Figure 7.146: Interaction effects between education, supportability and altruism. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

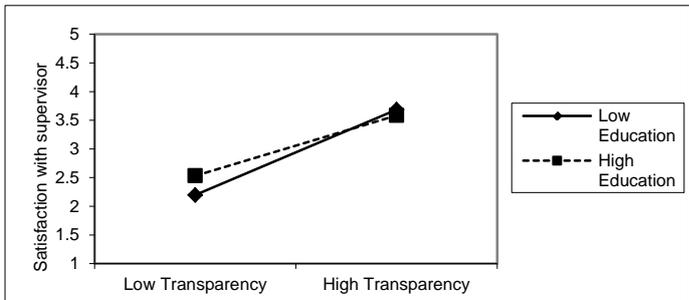


Figure 7.147: Interaction effects between education, transparency and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

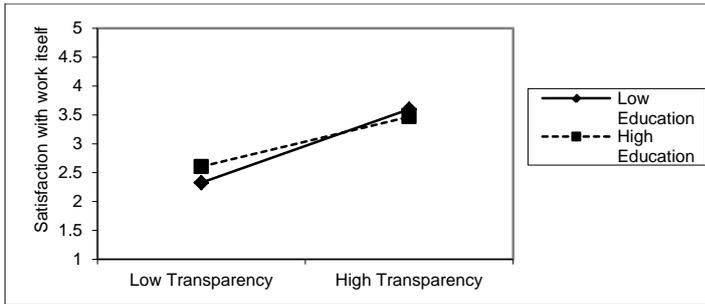


Figure 7.148: Interaction effects between education, transparency and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

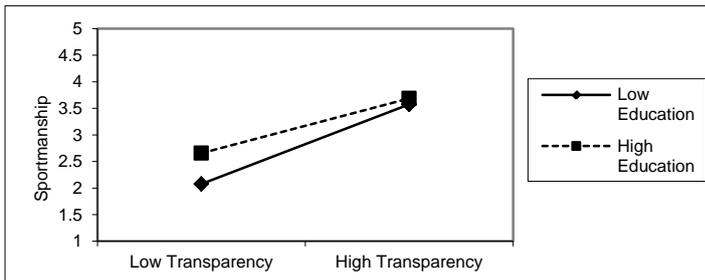


Figure 7.149: Interaction effects between education, transparency and sportmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

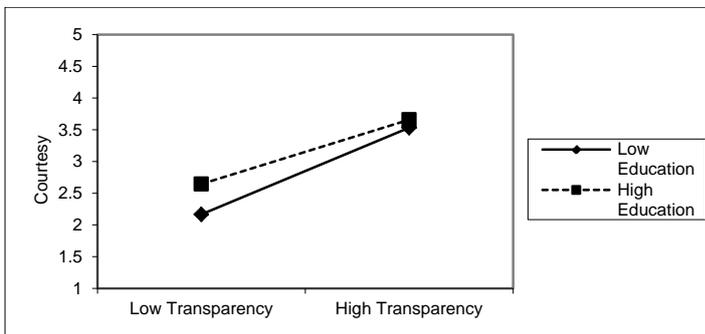


Figure 7.150: Interaction effects between education, transparency and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

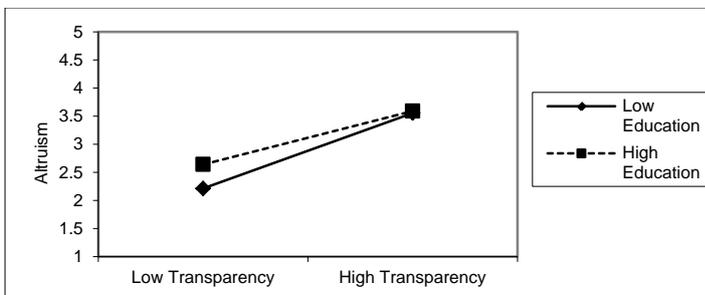


Figure 7.151: Interaction effects between education, transparency and altruism. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

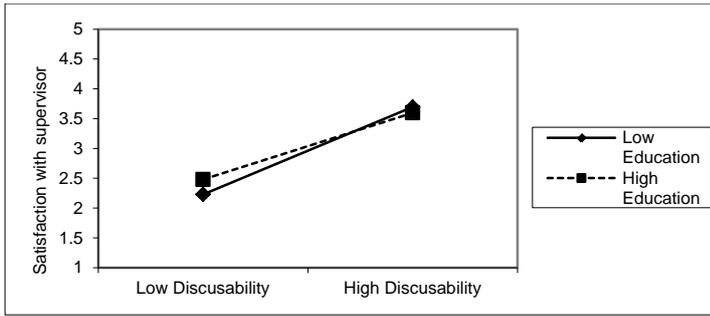


Figure 7.152: Interaction effects between education, discussability and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

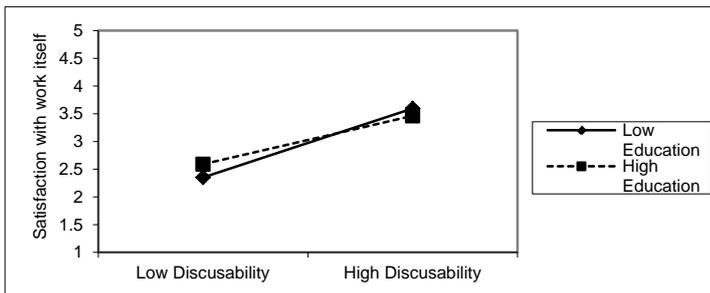


Figure 7.153: Interaction effects between education, discussability and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

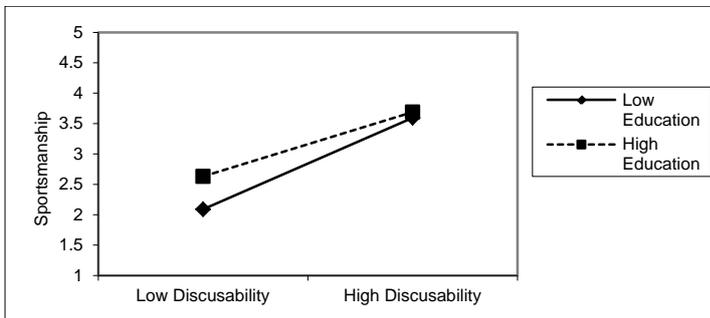


Figure 7.154: Interaction effects between education, discussability and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

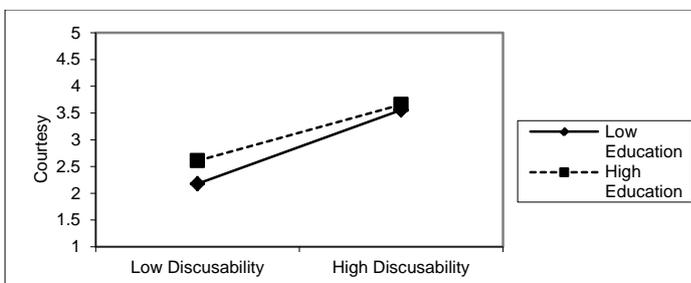


Figure 7.155: Interaction effects between education, discussability and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

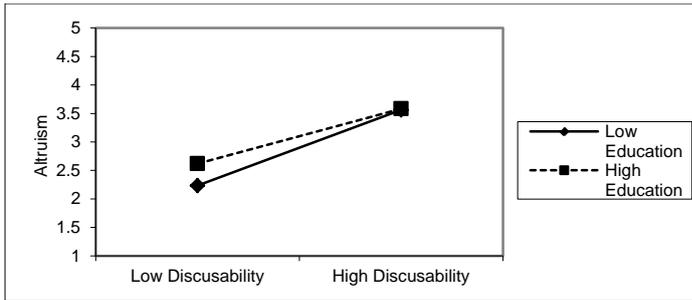


Figure 7.156: Interaction effects between education, discussability and altruism.

Low Education =  $\leq 4$ ; High Education =  $\geq 5$

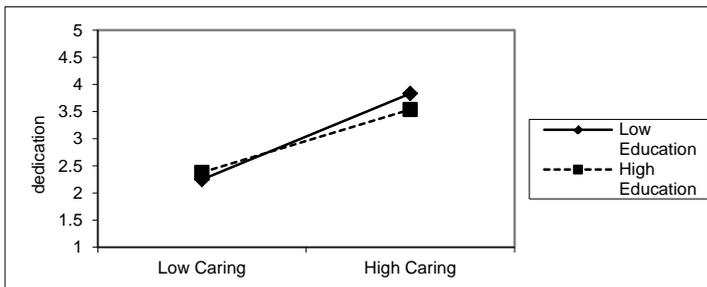


Figure 7.157: Interaction effects between education, caring and dedication

Low Education =  $\leq 4$ ; High Education =  $\geq 5$

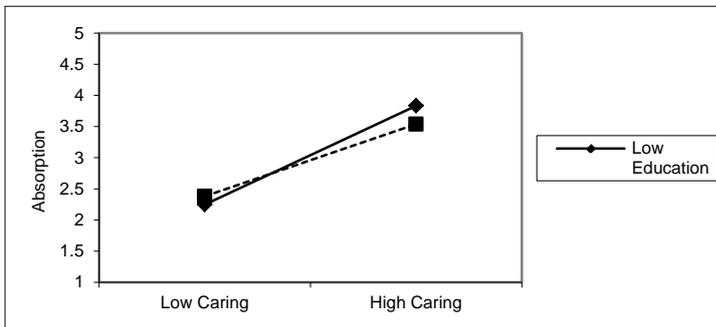


Figure 7.158: Interaction effects between education, caring and absorption

Low Education =  $\leq 4$ ; High Education =  $\geq 5$

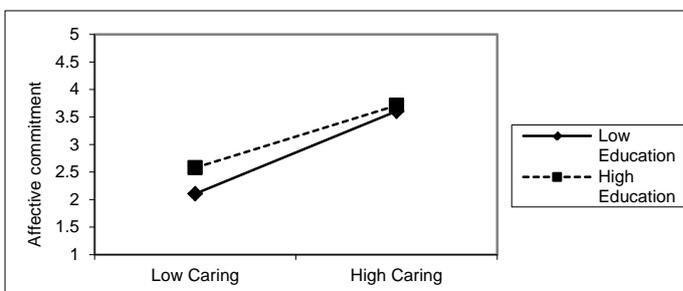


Figure 7.159: Interaction effects between education, caring and affective commitment

Low Education =  $\leq 4$ ; High Education =  $\geq 5$

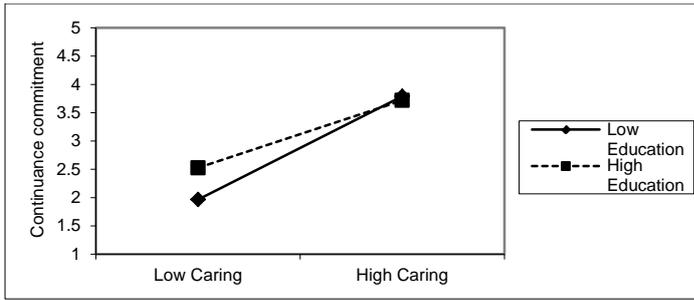


Figure 7.160: Interaction effects between education, caring and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

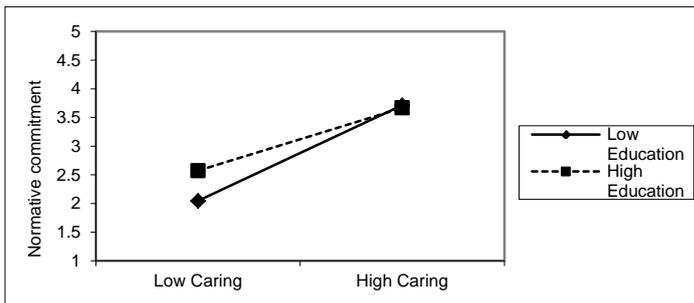


Figure 7.161: Interaction effects between education, caring and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

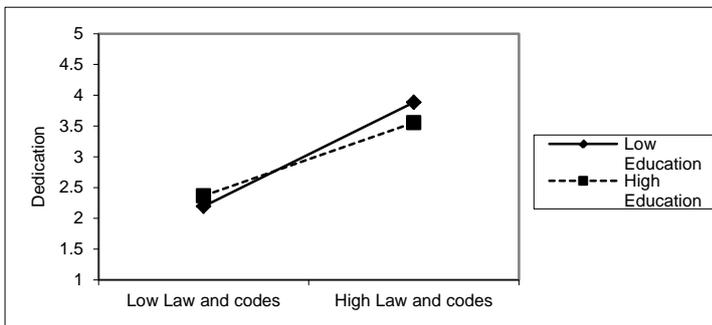


Figure 7.162: Interaction effects between education, law and codes and dedication Low Education =  $\leq 4$ ; High Education =  $\geq 5$

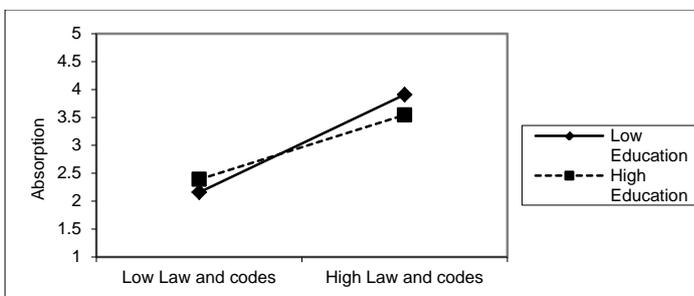


Figure 7.163: Interaction effects between education, law and codes and absorption Low Education =  $\leq 4$ ; High Education =  $\geq 5$

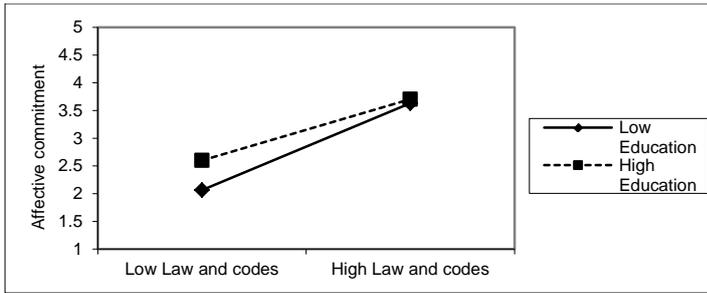


Figure 7.164: Interaction effects between education, law and codes and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

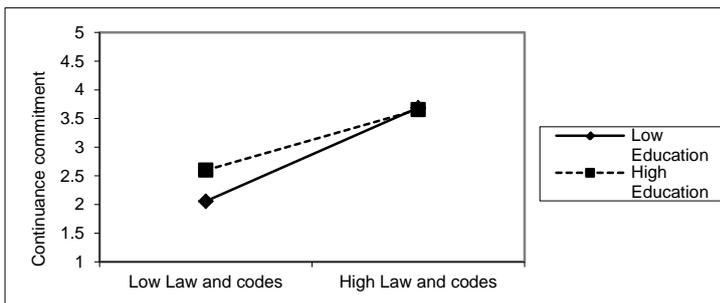


Figure 7.165: Interaction effects between education, law and codes and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

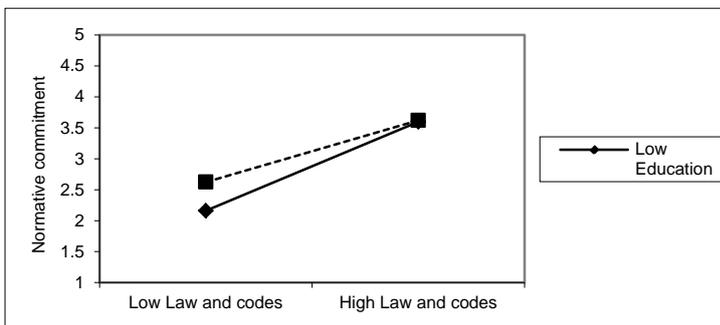


Figure 7.166: Interaction effects between education, law and codes and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

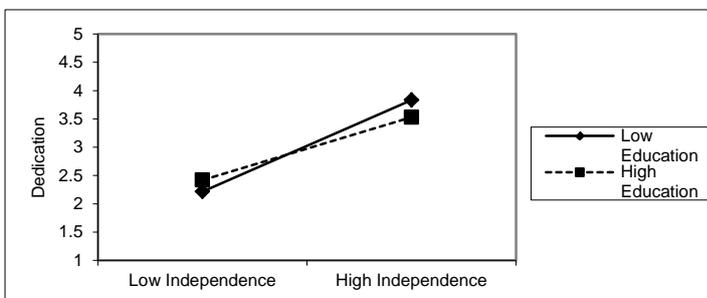


Figure 7.167: Interaction effects between education, independence and dedication Low Education =  $\leq 4$ ; High Education =  $\geq 5$

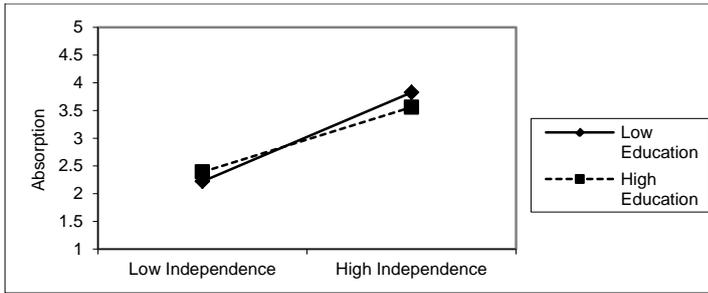


Figure 7.168: Interaction effects between education, independence and absorption Low Education =  $\leq 4$ ; High Education =  $\geq 5$

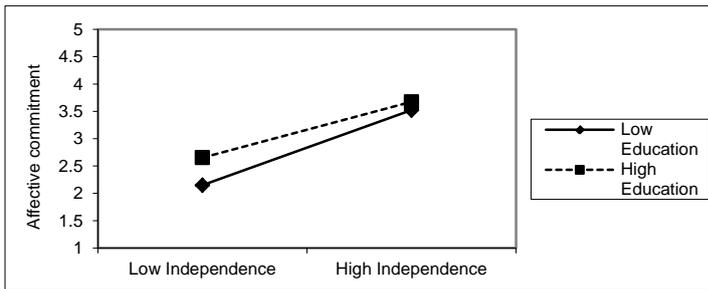


Figure 7.169: Interaction effects between education, independence and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

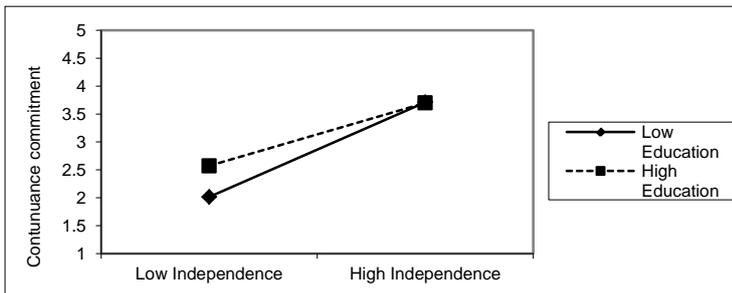


Figure 7.170: Interaction effects between education, independence and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

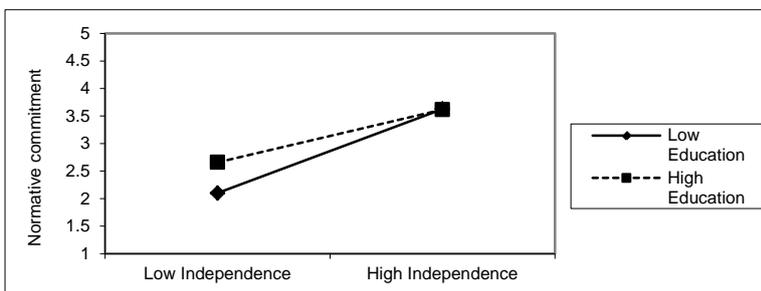


Figure 7.171: Interaction effects between education, independence and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

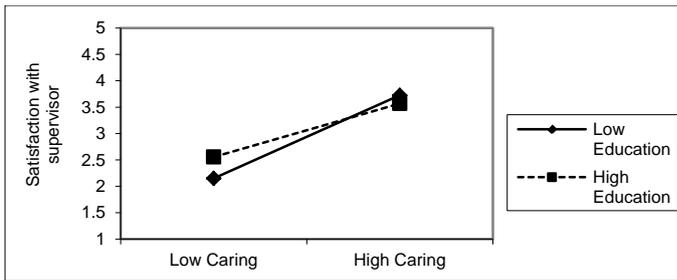


Figure 7.172: Interaction effects between education, caring and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

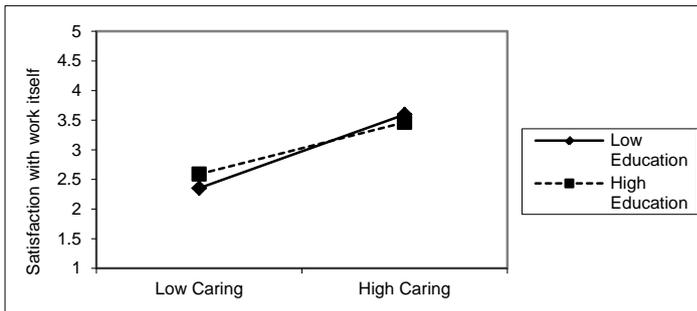


Figure 7.173: Interaction effects between education, caring and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

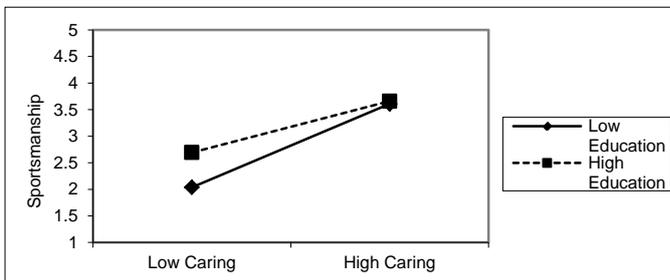


Figure 7.174: Interaction effects between education, caring and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

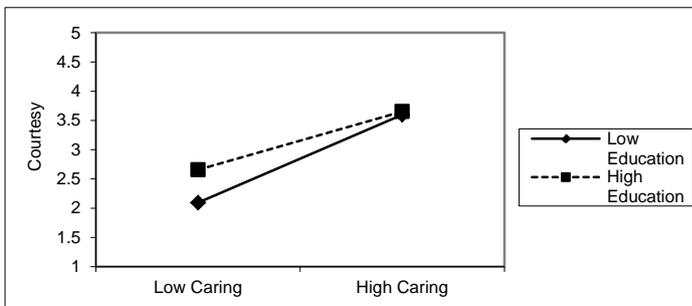


Figure 7.175: Interaction effects between education, caring and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

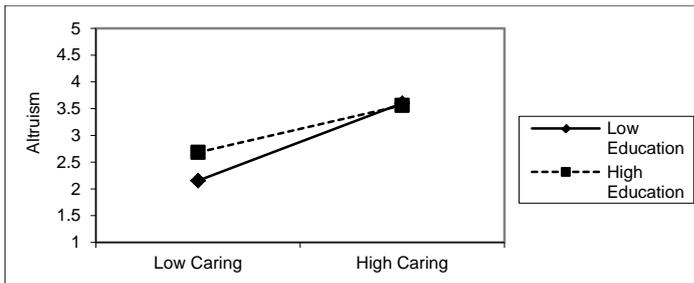


Figure 7.176: Interaction effects between education, caring and altruism  
 Low Education =  $\leq 4$ ; High Education =  $\geq 5$

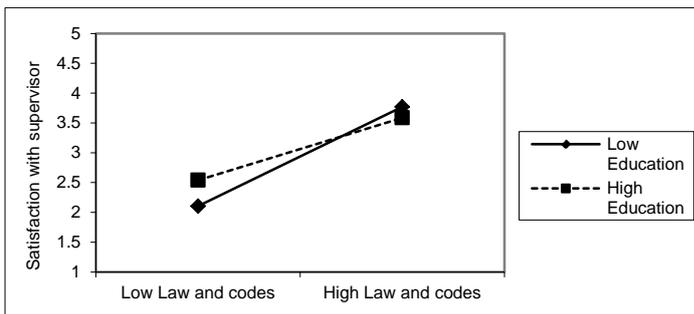


Figure 7.177: Interaction effects between education, law and codes and satisfaction with supervisor.  
 Low Education =  $\leq 4$ ; High Education =  $\geq 5$

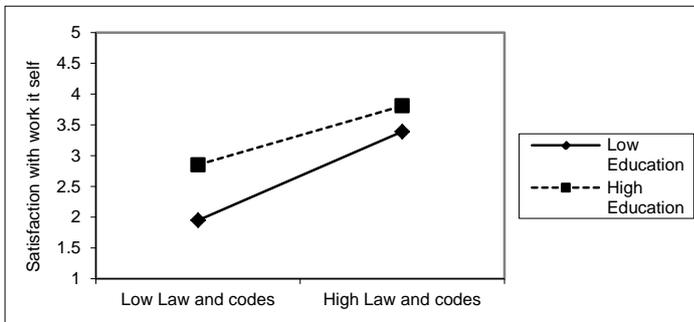


Figure 7.178: Interaction effects between education, law and codes and satisfaction with work itself.  
 Low Education =  $\leq 4$ ; High Education =  $\geq 5$

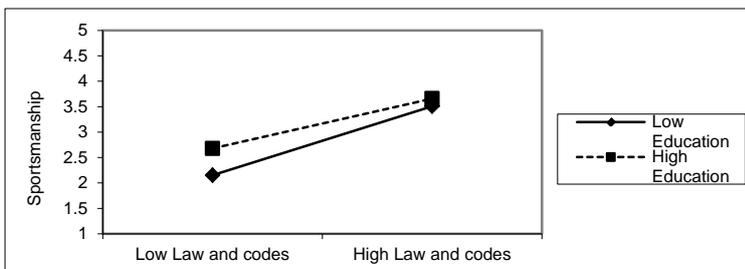


Figure 7.179 Interaction effects between education, law and codes and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

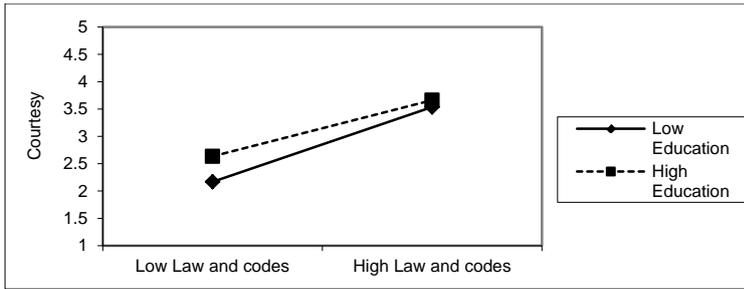


Figure 7.180: Interaction effects between education, law and codes and courtesy Low Education =  $\leq 4$ ; High Education =  $\geq 5$

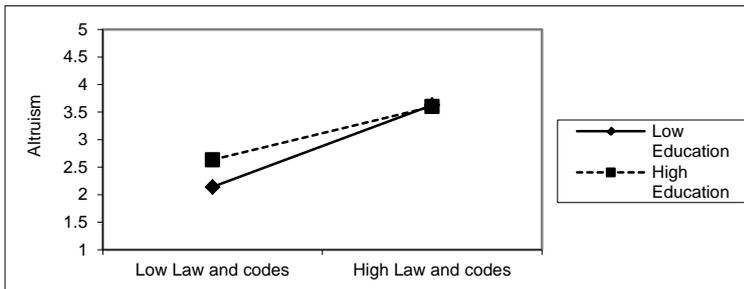


Figure 7.181: Interaction effects between education, law and codes and courtesy Low Education =  $\leq 4$ ; High Education =  $\geq 5$

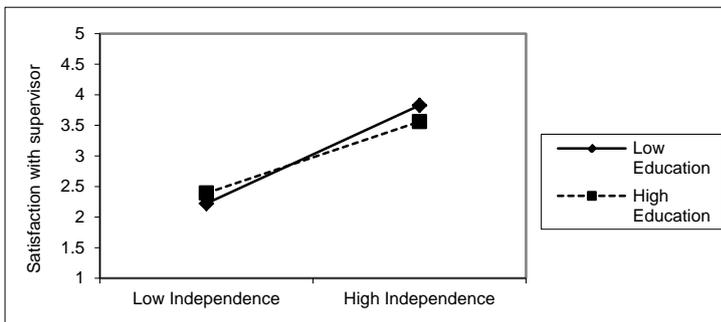


Figure 7.182: Interaction effects between education, independence and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

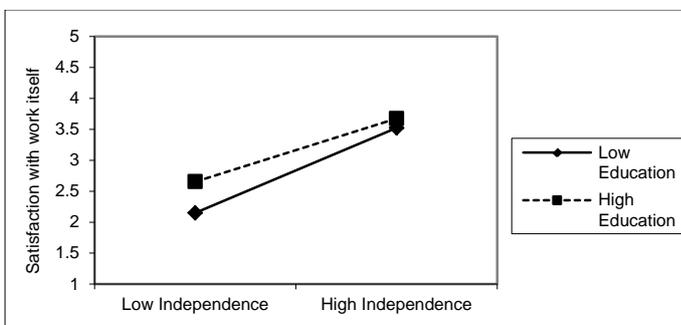


Figure 7.183: Interaction effects between education, independence and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

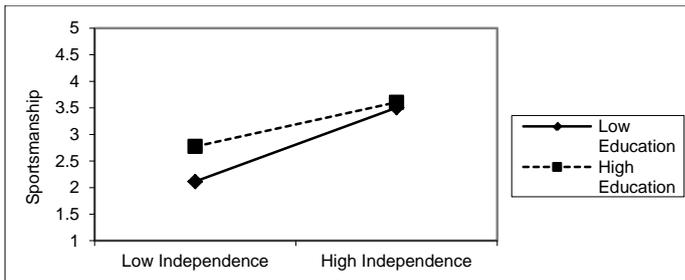


Figure 7.184: Interaction effects between education, independence and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

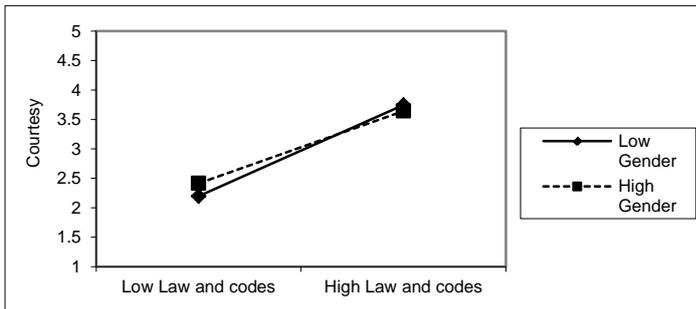


Figure 7.185: Interaction effects between education, independence and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

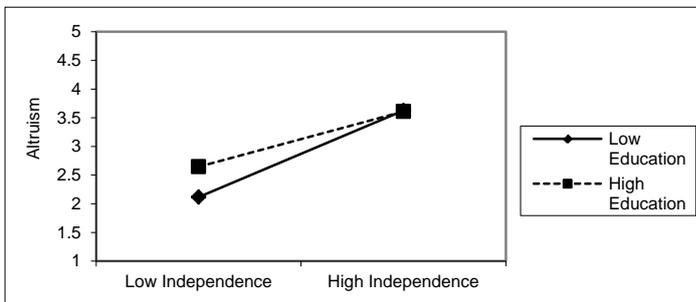


Figure 7.186: Interaction effects between education, independence and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

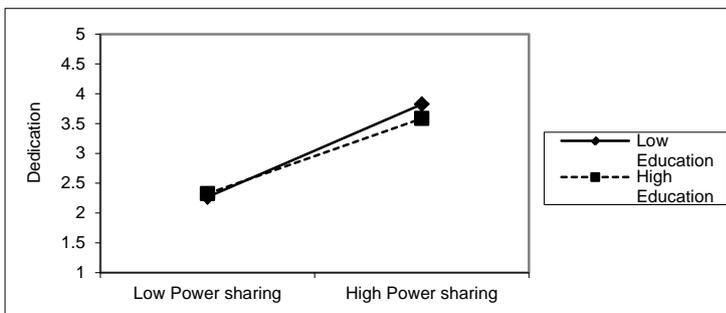


Figure 7.187: Interaction effects between education, power sharing and dedication. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

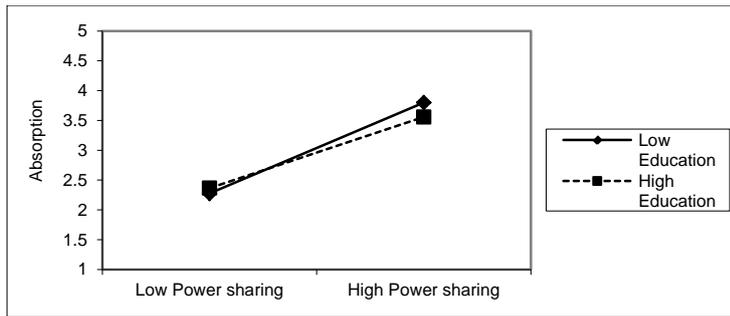


Figure 7.188: Interaction effects between education, power sharing and absorption. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

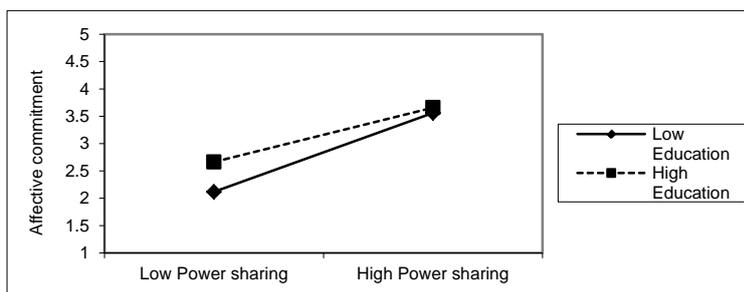


Figure 7.189: Interaction effects between education, power sharing and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

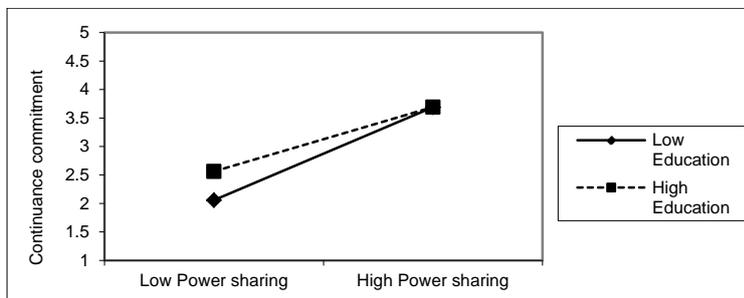


Figure 7.190: Interaction effects between education, power sharing and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

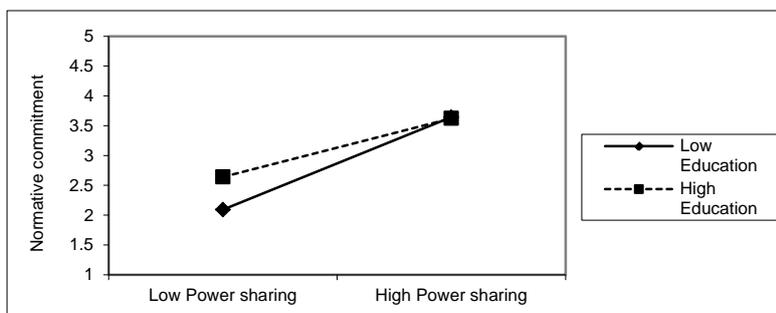


Figure 7.191: Interaction effects between education, power sharing and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

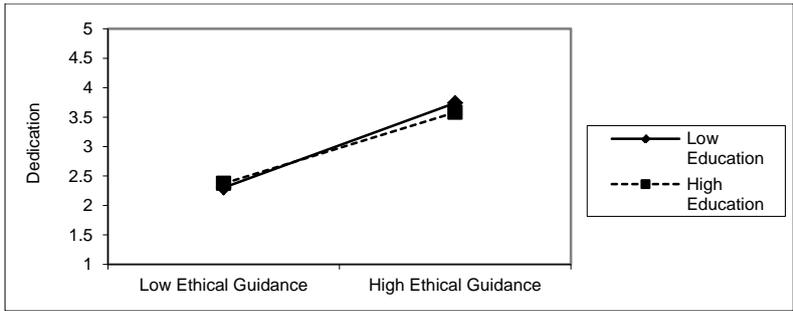


Figure 7.192: Interaction effects between education, ethical guidance and dedication Low Education =  $\leq 4$ ; High Education =  $\geq 5$

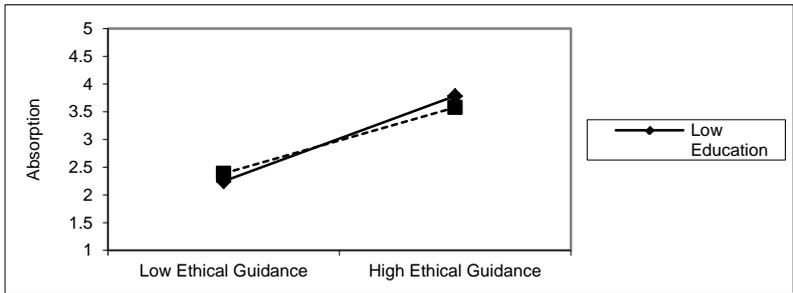


Figure 7.193: Interaction effects between education, ethical guidance and absorption Low Education =  $\leq 4$ ; High Education =  $\geq 5$

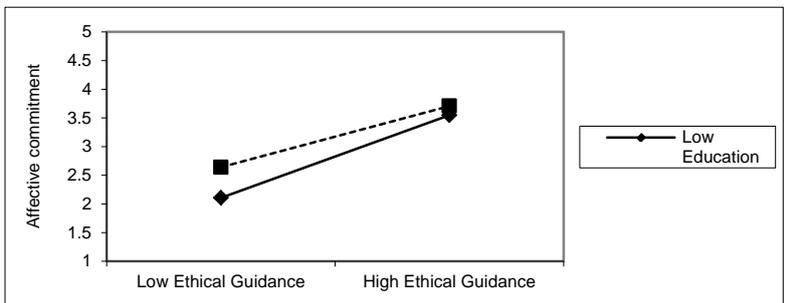


Figure 7.194: Interaction effects between education, ethical guidance and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

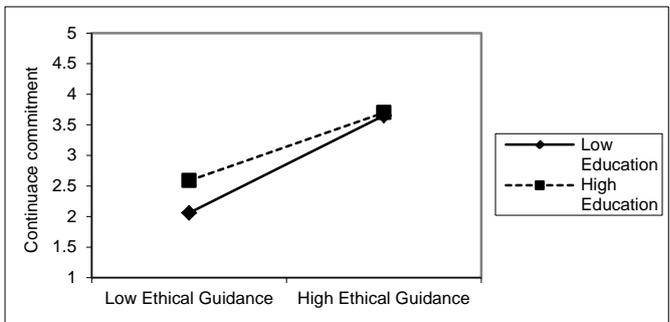


Figure 7.195: Interaction effects between education, ethical guidance and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

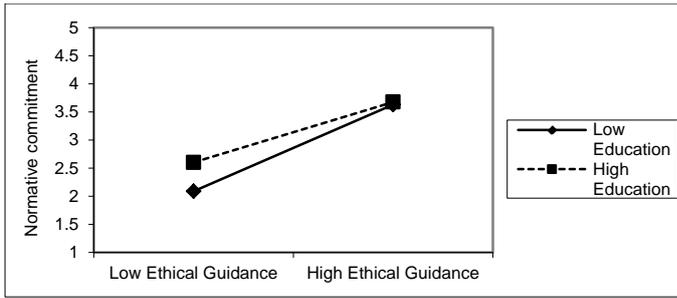


Figure 7.196: Interaction effects between education, ethical guidance and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

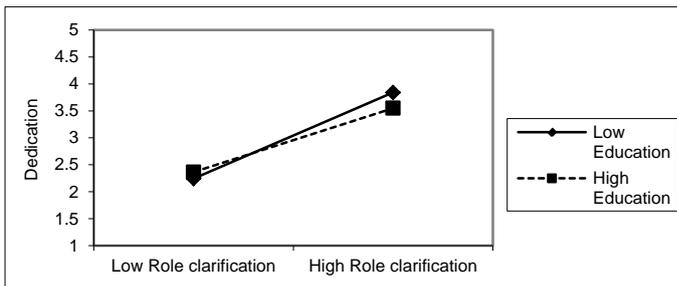


Figure 7.197: Interaction effects between education, role clarification and dedication Low Education =  $\leq 4$ ; High Education =  $\geq 5$

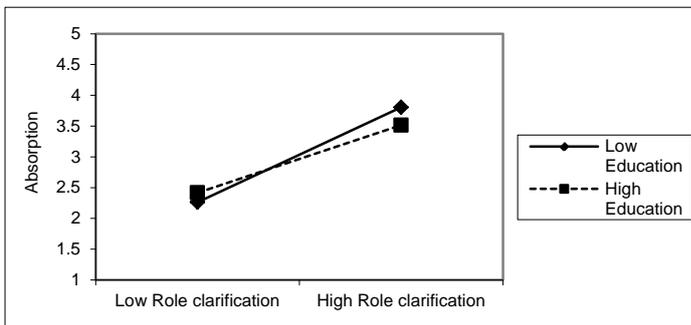


Figure 7.198: Interaction effects between education, role clarification and absorption Low Education =  $\leq 4$ ; High Education =  $\geq 5$

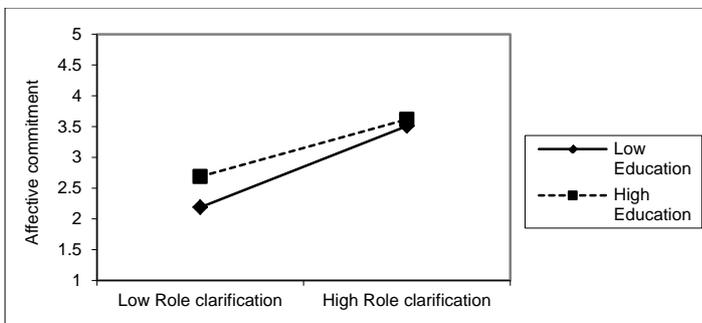


Figure 7.199: Interaction effects between education, role clarification and affective commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

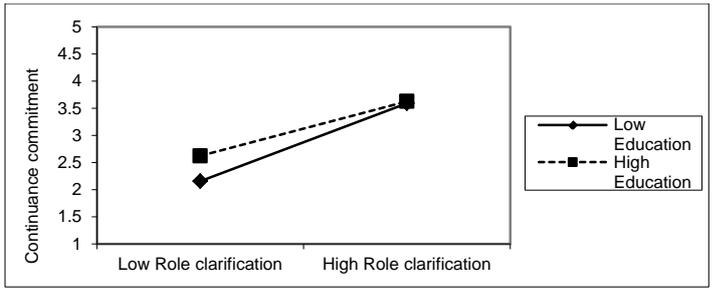


Figure 7.200: Interaction effects between education, role clarification and continuance commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

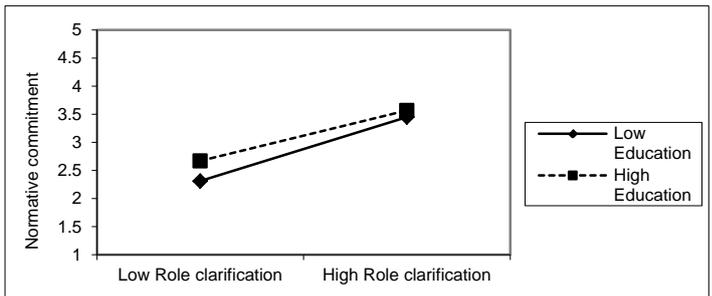


Figure 7.201: Interaction effects between education, role clarification and normative commitment. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

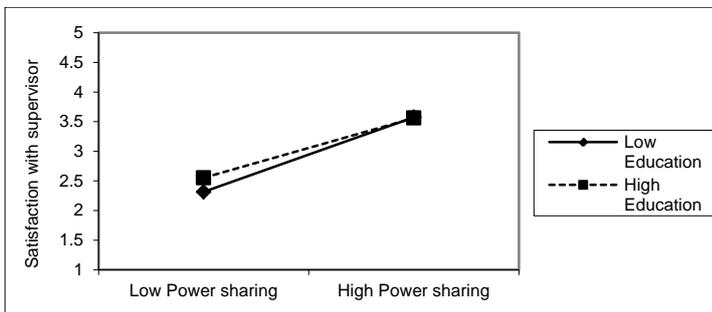


Figure 67.202: Interaction effects between education, power sharing and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

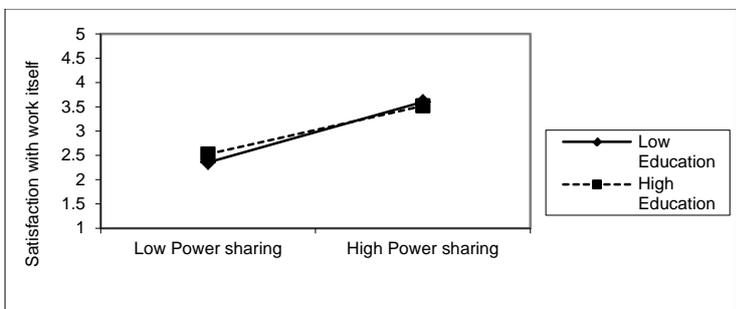


Figure 7.203: Interaction effects between education, power sharing and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

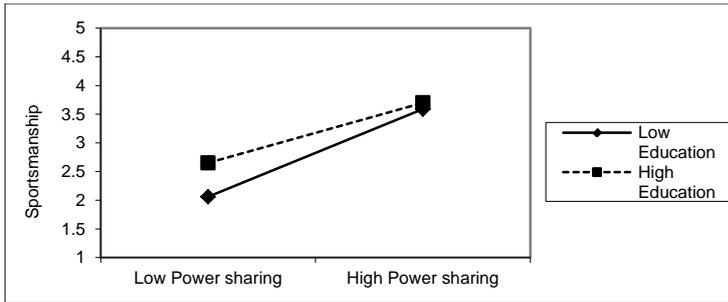


Figure 7.204: Interaction effects between education, power sharing and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

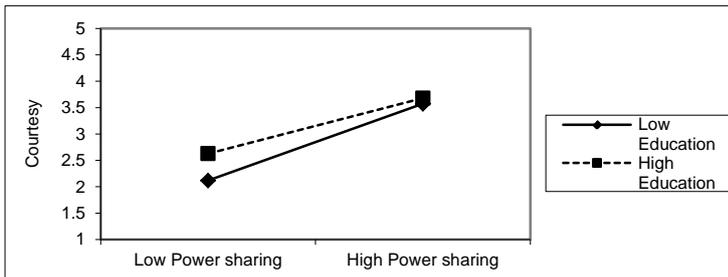


Figure 7.205: Interaction effects between education, power sharing and courtesy Low Education =  $\leq 4$ ; High Education =  $\geq 5$

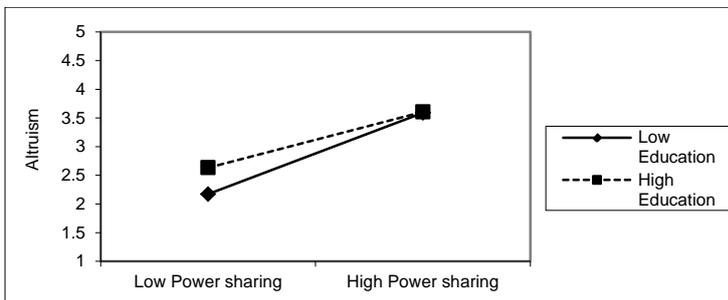


Figure 7.206: Interaction effects between education, power sharing and altruism. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

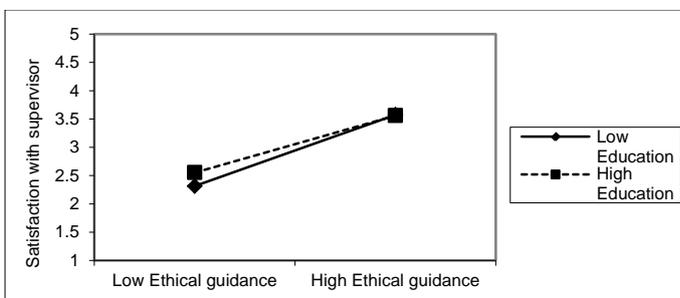


Figure 7.207: Interaction effects between education, ethical guidance and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

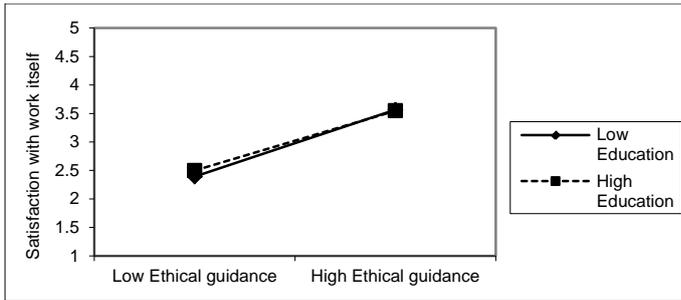


Figure 7.208: Interaction effects between education, ethical guidance and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

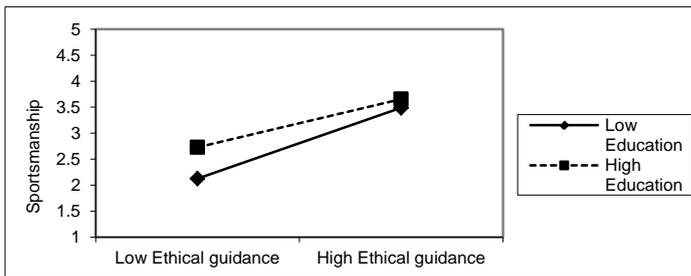


Figure 7.209: Interaction effects between education, ethical guidance and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

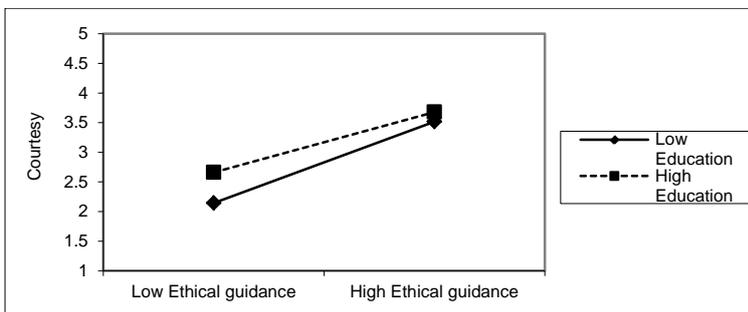


Figure 7.210: Interaction effects between education, ethical guidance and courtesy Low Education =  $\leq 4$ ; High Education =  $\geq 5$

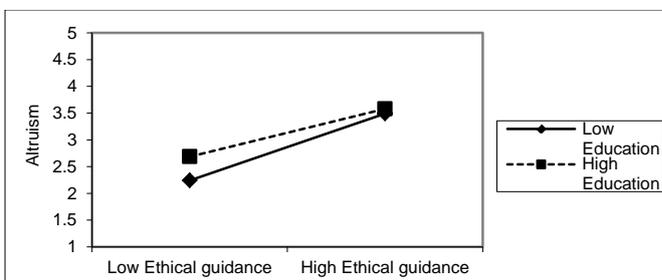


Figure 7.211: Interaction effects between education, ethical guidance and altruism Low Education =  $\leq 4$ ; High Education =  $\geq 5$

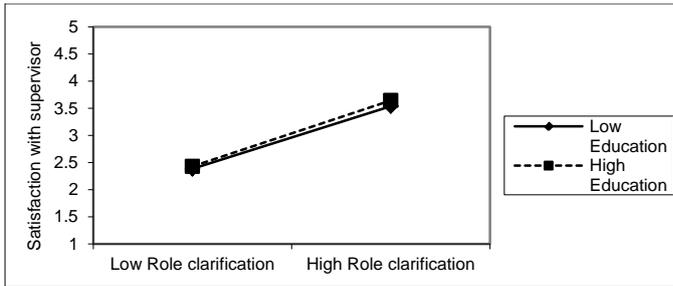


Figure 7.212: Interaction effects between education, role clarification and satisfaction with supervisor. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

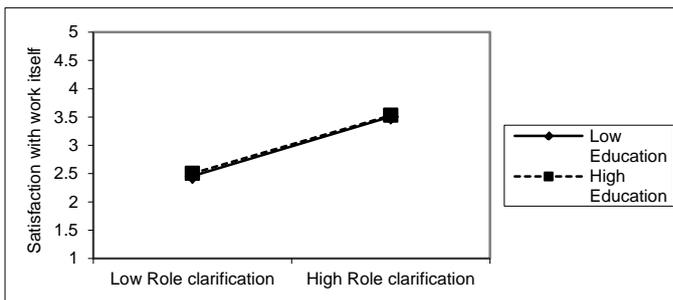


Figure 7.213: Interaction effects between education, role clarification and satisfaction with work itself. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

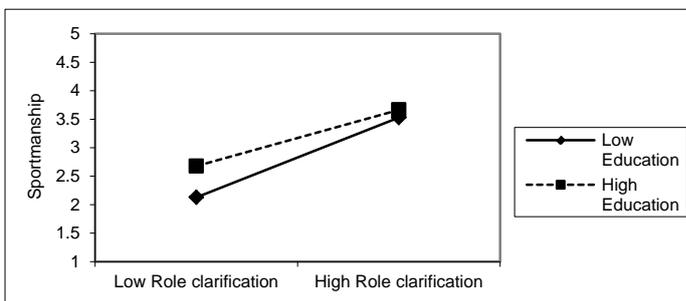


Figure 7.214: Interaction effects between education, role clarification and sportsmanship. Low Education =  $\leq 4$ ; High Education =  $\geq 5$ .

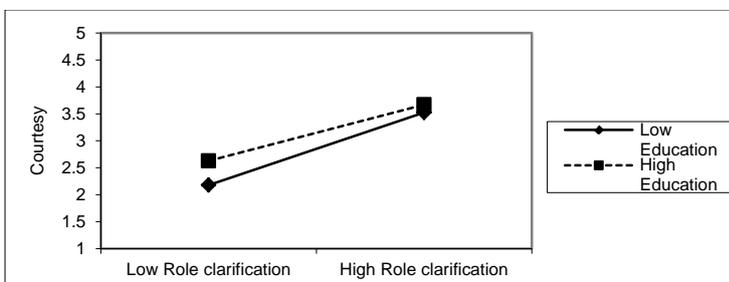


Figure 7.215: Interaction effects between education, role clarification and courtesy. Low Education =  $\leq 4$ ; High Education =  $\geq 5$

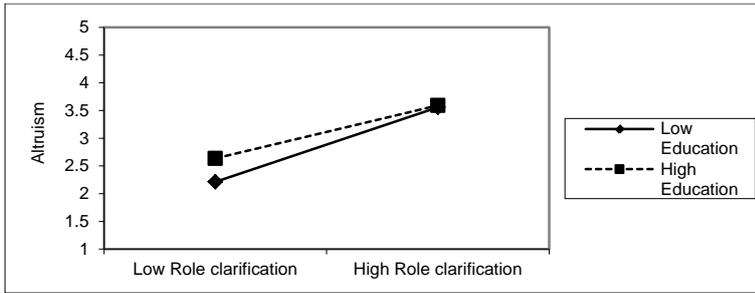


Figure 7.216: Interaction effects between education, role clarification and altruism Low Education =  $\leq 4$ ; High Education =  $\geq 5$

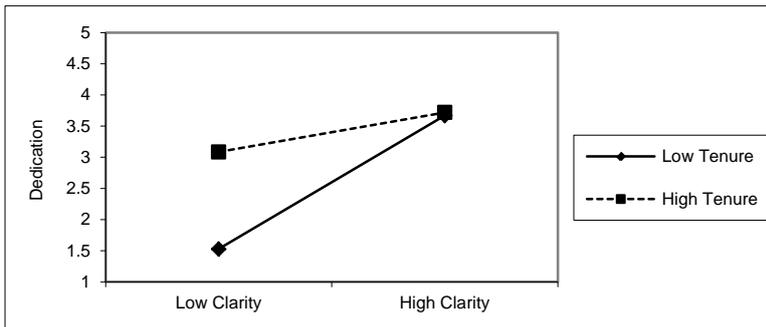


Figure 7.217: Interaction effects between tenure, clarity and dedication Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$

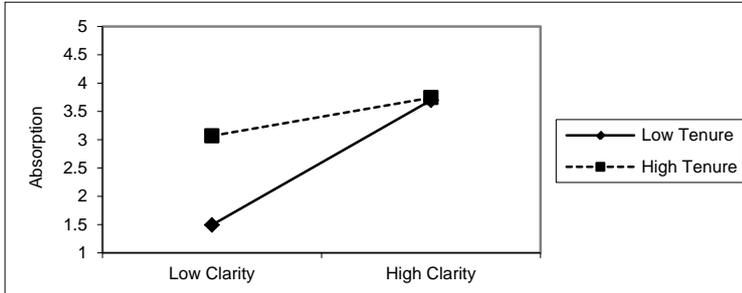


Figure 7.218: Interaction effects between tenure, clarity and absorption Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$

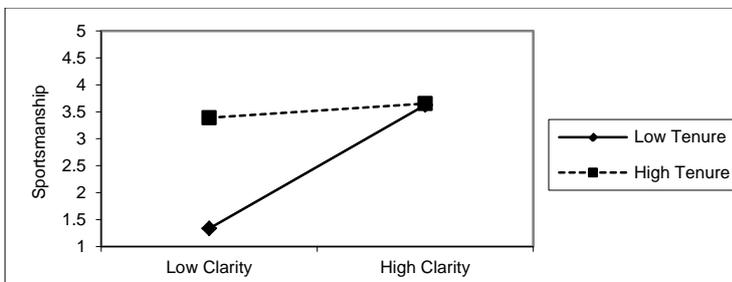


Figure 7.219: Interaction effects between tenure, clarity and sportsmanship Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$

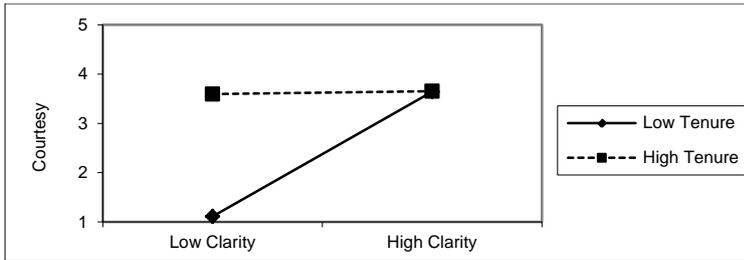


Figure 7.220: Interaction effects between tenure, clarity and courtesy  
 Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$

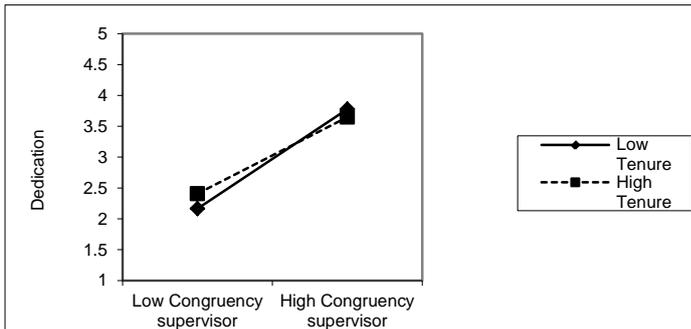


Figure 7.221: Interaction effects between tenure, congruency of supervisor and dedication. Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$

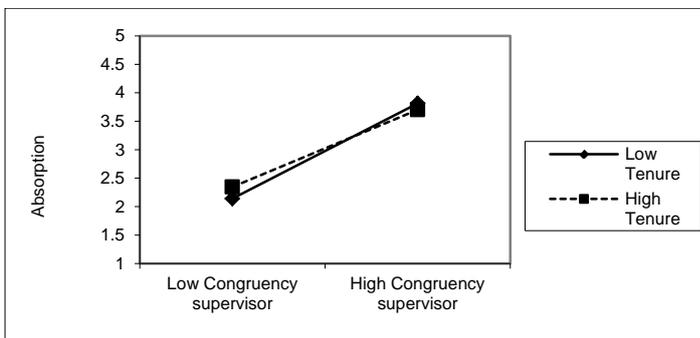


Figure 7.222: Interaction effects between tenure, congruency of supervisor and absorption. Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$

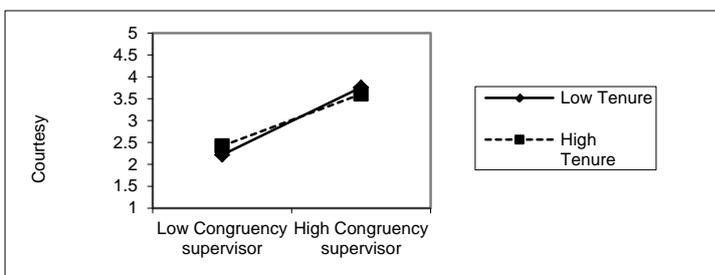


Figure 7.223: Interaction effects between tenure, congruency of supervisor and courtesy. Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$

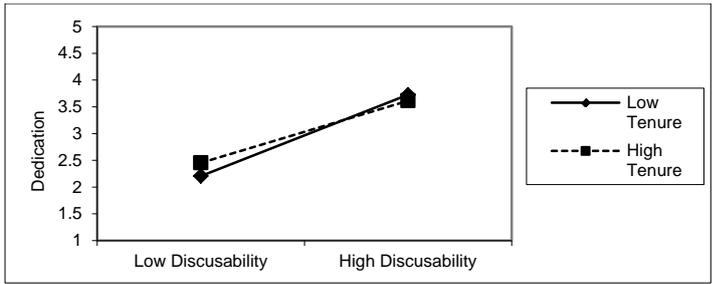


Figure 7.224: Interaction effects between tenure, discussability and dedication  
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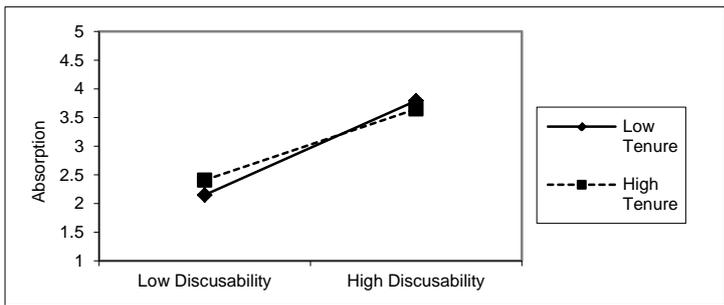


Figure 7.225: Interaction effects between tenure, discussability and absorption  
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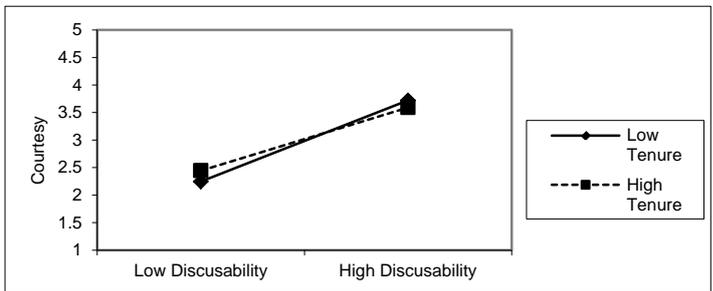


Figure 7.226: Interaction effects between tenure, discussability and courtesy  
 Low Tenure =  $\leq 5$ ; High Tenure =  $\geq 5$