

Assessing organisational climate and commitment in a mining services supplier

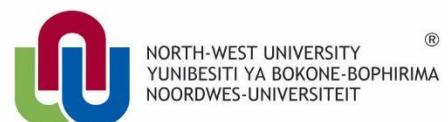
JJ Louw
20175531

Mini-dissertation submitted in partial fulfilment of the requirements for
the degree *Master in Business Administration* at the Potchefstroom
Campus of the North-West University

Supervisor: Prof R Lotriet

November 2016

It all starts here [™]



ABSTRACT

The primary objective of this research was to assess organisational climate as a predictor of organisational commitment in a South African company delivering services to the mining industry. Organisational commitment is a valuable significant determinant of the successful performance in an organisation. If it is suggested that human resources is one of an organisation's most valuable assets, then it can be argued that committed human resources is an organisation's competitive advantage, more so in an industry facing a continued downward trend in labour productivity and operating in the least productive of global regions. Tending to be more motivated, have higher performance levels and be less likely to exhibit absenteeism nor inclinations to quit their job than employees who are not, employees committed to their organisations have been shown to give companies a crucial competitive edge.

The research focussed on organisational climate as a functional mechanism by which employee commitment can be solicited. The relationship between organisational climate and organisational commitment has been studied in various industries and shown to be significant. The research sought to establish the current organisational climate of the organisation using the Organisational Climate Questionnaire and relate this to organisational commitment as determined through the use of the TCM Organisational Commitment Questionnaire. An empirical study using the survey research strategy was employed and from a total of 92 respondents, the two instruments were validated for the sample and found to be reliable. The research showed a significant positive correlation between organisational climate and affective and normative as well as total commitment. Of the organisational climate determinants of commitment, trust was found to be most influential, followed by job satisfaction. Conclusions regarding the findings of the research were presented and recommendations for the organisation as well as for future research made.

Keywords: organisational climate, organisational commitment

ACKNOWLEDGEMENTS

I would like to thank the following people:

- My family and friends for their support and encouragement;
- My study leader, Prof. Ronnie Lotriet, for his guidance and support;
- Mr. F.G. Dixon, who encouraged me to start my MBA;
- Ms. Xenia Terreblanche, my special friend and confidante, for her love, care and optimism;
- Ms. Wilma Breytenbach, for her assistance with the statistical analysis of this study;
- Ms. Sithabile Moyo, for her assistance with statistical analysis and interpretation as well as providing expert opinion and editing of this mini-dissertation;
- Ms. Antoinette Bisschoff, for the language editing of this mini-dissertation.

The Author

Nov. 2016

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	vii
LIST OF TABLES	viii
LIST OF ACRONYMS	ix
CHAPTER 1 – NATURE AND SCOPE OF THE STUDY	1
1.1. Introduction.....	1
1.2. Problem statement	3
1.3. Objectives of the study	4
1.3.1. Primary objective	4
1.3.2. Secondary objectives.....	4
1.4. Research questions	5
1.5. Research hypothesis	5
1.6. Research methodology	5
1.6.1. Literature review.....	5
1.6.2. Empirical investigation	5
1.7. Scope of study	9
1.8. Limitations of the study	9
1.9. Contribution of the study	10
1.10. Ethical considerations	11
1.11. Layout of the study	12
1.12. Summary.....	13
CHAPTER 2 – LITERATURE REVEIW	15
2.1. Introduction.....	15
2.2. Industry overview	15
2.3. Organisation profile	20
2.4. Organisational climate	20
2.3.1. The organisational climate concept.....	21
2.3.2. Distinction between organisational climate and organisational culture... 22	
2.3.3. Approaches of organisational climate	24

2.3.4.	Dimensions of organisational climate.....	28
2.3.5.	Levels of organisational climate.....	33
2.3.6.	Organisational Climate Model.....	34
2.3.7.	Importance of Organisational Climate.....	37
2.5.	Organisational commitment.....	38
2.4.1.	The organisational commitment concept.....	38
2.4.2.	Dimensions of organisational commitment.....	39
2.4.3.	Importance of organisational commitment.....	41
2.6.	Relationship between organisational commitment and organisational climate	42
2.7.	Summary.....	44
CHAPTER 3 – EMPIRICAL INVESTIGATION.....		46
3.1.	Introduction.....	46
3.2.	Research methodology.....	46
3.2.1.	Research approach.....	46
3.2.2.	Target population.....	47
3.2.3.	Sampling.....	47
3.2.4.	Data Collection and analysis.....	48
3.3.	Results.....	50
3.3.1.	Demographic profile of respondents:.....	50
3.3.2.	Determining current organisational climate and commitment level.....	57
3.3.3.	Statistical analysis and hypothesis testing.....	61
3.3.4.	Reliability of measuring instruments.....	62
3.3.5.	Assessing Validity.....	65
3.3.6.	Testing the hypothesis.....	69
3.3.7.	Opinion on organisational assets and liabilities.....	77
3.4.	Summary.....	78
CHAPTER 4 – CONCLUSIONS AND RECOMMENDATIONS.....		80
4.1.	Introduction.....	80
4.2.	Main findings from the statistical analysis.....	80
4.2.1.	Current perception of the organisational climate by employees (RQ1).....	80
4.2.2.	Current level of organisational commitment (RQ2).....	83
4.2.3.	The relationship between organisational climate and organisational commitment (RQ3).....	84

4.3. Evaluation of the research	84
4.4. Recommendations for improving organisational climate and increasing organisational commitment (RQ4)	85
4.5. Recommendations for future research:	86
4.6. Conclusion	87
LIST OF REFERENCES.....	88
APPENDICES.....	108
Appendix A: TCM Questionnaire	109
Appendix B: Permission to use Organisational Climate Questionnaire	117
Appendix C: Original Organisational Climate Questionnaire	118
Appendix D: Research Questionnaire	129
Appendix E: Permission to conduct study- CEO, CFO	136
Appendix F: Language letter.....	1367
Appendix G: Statistical Consultation Service.....	1368

LIST OF FIGURES

Figure 1.1: Summary of research procedure	7
Figure 1.2: Chapter layout.....	16
Figure 2.1: Output per employee in relevant measure.....	17
Figure 2.2: Labour cost per unit of output and average sales per unit of output.....	18
Figure 2.3: Productivity Performance from 2011 to 2014 for Africa.....	18
Figure 2.4: Labour cost as a % of revenue.....	26
Figure 2.5: Structural Approach to Organisational Climate.....	24
Figure 2.6: Perceptual Approach to Organisational Climate.....	25
Figure 2.7: Interactive Approach to Organisational Climate.....	26
Figure 2.8: Cultural Approach to Organisational Climate.....	28
Figure 2.9: Organisational Climate Model.....	35
Figure 2.10: Three-component Model of Organisational Commitment.....	39
Figure 2.11: Empirical test framework.....	45
Figure 3.1: Language distribution.....	53
Figure 3.2: Response rates by legal entity and department.....	56
Figure 3.3: Profile of mean commitment scores.....	61
Figure 4.1: Summary of the evaluation.....	85

LIST OF TABLES

Table 2.1: Summary of the differences between organisational climate and organisational culture.....	23
Table 2.2: Dimensions of Organisational Climate.....	32
Table 3.1: Demographics: Descriptive statistics.....	51
Table 3.2: Age * Gender Cross tabulation.....	52
Table 3.3: Educational Level * Organisational level Cross tabulation.....	54
Table 3.4: Years of service*Organisational Level*Organisational Level Cross tabulation...	55
Table 3.5: Descriptive statistics for the organisational climate questionnaire.....	57
Table 3.6: Descriptive statistics for organisational commitment questionnaire.....	60
Table 3.7: Summary of Cronbach Alpha Coefficients for the sample.....	64
Table 3.8: Summary Item Statistics: Organisational Climate.....	65
Table 3.9: KMO measures of sampling adequacy.....	68
Table 3.10: Pearson Correlation coefficients.....	71
Table 3.11: R ² for organisational climate and commitment.....	72
Table 3.12: Parameter estimates for Commitment against Organisational climate.....	73
Table 3.13: Analysis of Variance in commitment across demographic groups.....	75
Table 3.14: Cohen's_d Effect sizes for department and years of service.....	77
Table 3.14: Themes on Organisation's Assets and Liabilities.....	78
Table 4.1: Organisational climate dimension rank-order.....	82

LIST OF ACRONYMS

OCL	Organisational Climate
OC	Organisational Commitment
AC	Affectionate Commitment
NC	Normative Commitment
CC	Continuance Commitment

CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1. Introduction

Organisational commitment is valuable and can have a significant impact on the successful performance of an organisation (Nehmeh, 2009). If it is suggested that human resources is one of an organisation's most valuable assets, then it can be argued that committed human resources should be regarded as an organisation's competitive advantage (Nehmeh, 2009).

A committed workforce will associate themselves with the culture of the organisation, and will go beyond that which is expected of him or her (Nehmeh, 2009). Additionally, a committed workforce tends to be more motivated, have higher performance levels and will less likely be absent from work or quit their job than an employee who is not (McShane & Van Glinow, 2010). According to Mguqulwa (2008), there is a 57% improvement in the additional effort an employee will apply on the job when he or she is committed, which translates into an overall improvement of 20% in performance. Committed employees are more productive, making better use of limited resources to do their job, leading to more effective use of resources and higher output with less input. All of this has a direct impact on the bottom-line (Dixit & Bhatni, 2012).

Organisational commitment is the psychological bond that ties an employee with the organisation (Ghasemi & Keshavarzi, 2014). Organisational commitment is a multidimensional construct consisting of three components, namely affective, normative and continuance commitment (De Clercq, 2007). Affective commitment pertains to an individual's identification with and emotional attachment to an organisation, while normative commitment refers to the feeling of loyalty to an employer that obliges an employee to remain with the organisation, and finally, continuance commitment, which refers to an employee's understanding of the price relating to leaving the organisation (De Clercq, 2007). These concepts will be discussed in detail in the literature review section in Chapter 2.

The value of a committed workforce considered, the question for organisations remains the mechanisms by which employee commitment can be solicited. Several factors play a role in getting employees engaged and committed to an organisation.

Some of these include self-efficacy, where an individual believes in his or her effectiveness in performing specific tasks and the persistence involved (Chowwen, 2012). Chowwen (2012) found that people with a higher degree of emotional intelligence have the potential to contribute to more positive approaches, behaviours and outcomes in the organisation. Another such factor is organisational climate (Bahrami *et al.*, 2016). Organisational climate can be defined as an organisation's unique characteristics which include the collective perception of the members of the organisation and the interaction between them (Ghasemi & Keshavarzi, 2014). This paper will focus on organisational climate as predictor of organisational commitment.

Organisational climate should not be confused with organisational culture. Organisational culture refers to the foundations on which the organisation has been built and consists of values which guides the organisation on how it does business, is usually based on the values held by the founder and develops over a long period of time (Castro, 2010). Organisational climate however describes the employees' current perception of how it feels to work at the organisation and their perceptions about leadership, structure, rewards and recognition (HTC Consulting, 2011). Changing organisational culture is difficult, whereas changing organisational climate can be more easily changed by means of altering leadership styles, work practices, performance management and dealing with conflict (HTC Consulting, 2011).

The relationship between organisational climate and organisational commitment has been studied in various industries and shown to be significant. Studies in the medical industry have showed that there is a significant relationship between the two constructs (Bahrami *et al.*, 2016), while those conducted in the public sector (Hassan & Rohrbaugh, 2012) and the automotive industry (Lee, 2004) have also revealed similar results. Using an organisational climate survey is the closest management can come to a profit and loss statement of how well a company uses its people (Hay Group, 2009). An organisational climate survey can be used:

- to assist leaders to understand the connection between the decisions they make and the climate they create for employees;
- to help them to understand the climate they themselves experience;
- as part of an executive coaching intervention or any one-on-one coaching and development process; and

- a leadership development tool either for individual leaders or across teams and work units.

Once the current climate is identified, management can establish key areas of improvement. For the chosen organisation, if the theory of a positive relationship between organisational climate and organisational commitment can be proved, then management will be able to reap the benefits of a committed workforce by positively influencing the organisational climate.

1.2. Problem statement

In introducing the concepts of organisational climate and organisational commitment, indication has been made to the effect that if employees are committed, they tend to be more productive and have higher performance levels. The Global Productivity Report indicated that Sub-Saharan Africa (including South Africa), has the lowest levels of productivity than any other global region (De Vries & Erumban, 2015). This suggests that a lot of limited resources are going to waste and there is room to improve productivity in South Africa. If organisational commitment is one of the factors that significantly improves productivity of employees, it can be argued that this research is significant, especially in a South African context.

Studies of employee commitment are particularly important in mining industry as it has experienced a decline in labour productivity since 1993, a decline from which South Africa has not been spared. This country has experienced an increase of labour costs (20%-25%), yet labour productivity has declined by 35% (Mitchell & Steen, 2015). The organisation being studied is operating in this industry and therefore is experiencing the same phenomenon but has never performed such a study or any organisational study relating to employee commitment.

The benefits of a committed and thus productive workforce can be viewed on a macro and micro economic level. Kruger (2012) summarises the benefits on a country, organisational and individual scale. On a country scale, productivity leads to upgraded infrastructure, a cleaner environment and the provision of better social services and care for the poor, disabled and others. An organisation with a more productive employee force is able to create jobs, provide better pay and working environments

and increase its contribution to taxes. A more productive individual will benefit with greater job security, better opportunities, increased wages and increased quality of life. The country, organisation and the individual interact to creating a more prosperous economy. From this broad view of productivity, it can be seen that a productive workforce has far-reaching benefits for both the organisation and its community. If committed employees are more productive than those who are not, it can therefore be argued that management needs to invest time and resources in determining their employees' current commitment and finding innovative ways to improve that commitment.

Organisational climate leads to organisational commitment. This has been found in research on the relationship between organisational commitment and organisational climate and has been performed in industries such as nursing (Bahrami, *et al*, 2016), education (Saeidipour, 2013), wool (Iqdal, 2008) and telecommunication (Bhaesajsanguan, 2010). These studies have found a significant positive relationship between the two variables. No research on this topic could however be found in a South African context, let alone in the mining service industry at this stage.

1.3. Objectives of the study

1.3.1. Primary objective

The primary objective of this research was to assess organisational climate as a predictor of organisational commitment in a mining services provider.

1.3.2. Secondary objectives

In determining the influence of organisational climate on organisational commitment, the research specifically sought to:

- i. Analyse the current organisational climate of the organisation
- ii. Analyse the current organisational commitment in the organisation
- iii. Make recommendations on how to improve organisational climate of the organisation if it is found that the climate is unfavourable

1.4. Research questions

RQ1: What is the current perception of the organisational climate by employees at the organisation?

RQ2: What is the current level of organisational commitment in the organisation?

RQ3: What is the relationship between organisational climate and organisational commitment in the context of the organisation?

RQ4: How can the organisational climate be altered to produce a favourable climate conducive for increased organisational commitment?

1.5. Research hypothesis

H0: Organisational climate does not influence organisational commitment

HA: Organisational climate influences organisational commitment

1.6. Research methodology

1.6.1. Literature review

In phase one, a comprehensive review of literature on organisational climate and organisational commitment was done. The sources that consulted included:

- Electronic articles and dissertations relating to the constructs
- NWU library-database

1.6.2. Empirical investigation

1.6.2.1. Research approach

A quantitative research approach was followed making use of a cross-sectional survey with a convenience sample of 92 among 150 employees of the chosen organisation. Convenience samples are sample selection methods which have no probability-based properties and therefore include those of the population which are easily accessible as a sample (Price, 2013). Quantitative research makes use of statistical, mathematical and numerical analysis of data collected through polls, surveys and

questionnaires to objectively generalise the results across groups of people or to explain a particular phenomenon (Muijs, 2010). A cross-sectional survey is a quantitative research approach that measures a population at a certain point of time, providing a “snapshot” of the current state of things, in this case, organisational climate and commitment (Saunders, 2016). Self-administered questionnaires will be distributed to the subjects by the researcher.

A survey was selected as it provides an accurate portrayal or account of the characteristics of the opinions and beliefs of the sample. This design was chosen to meet the objectives of the study, namely to assess the influence organisational climate has on organisational commitment in a specific organisation.

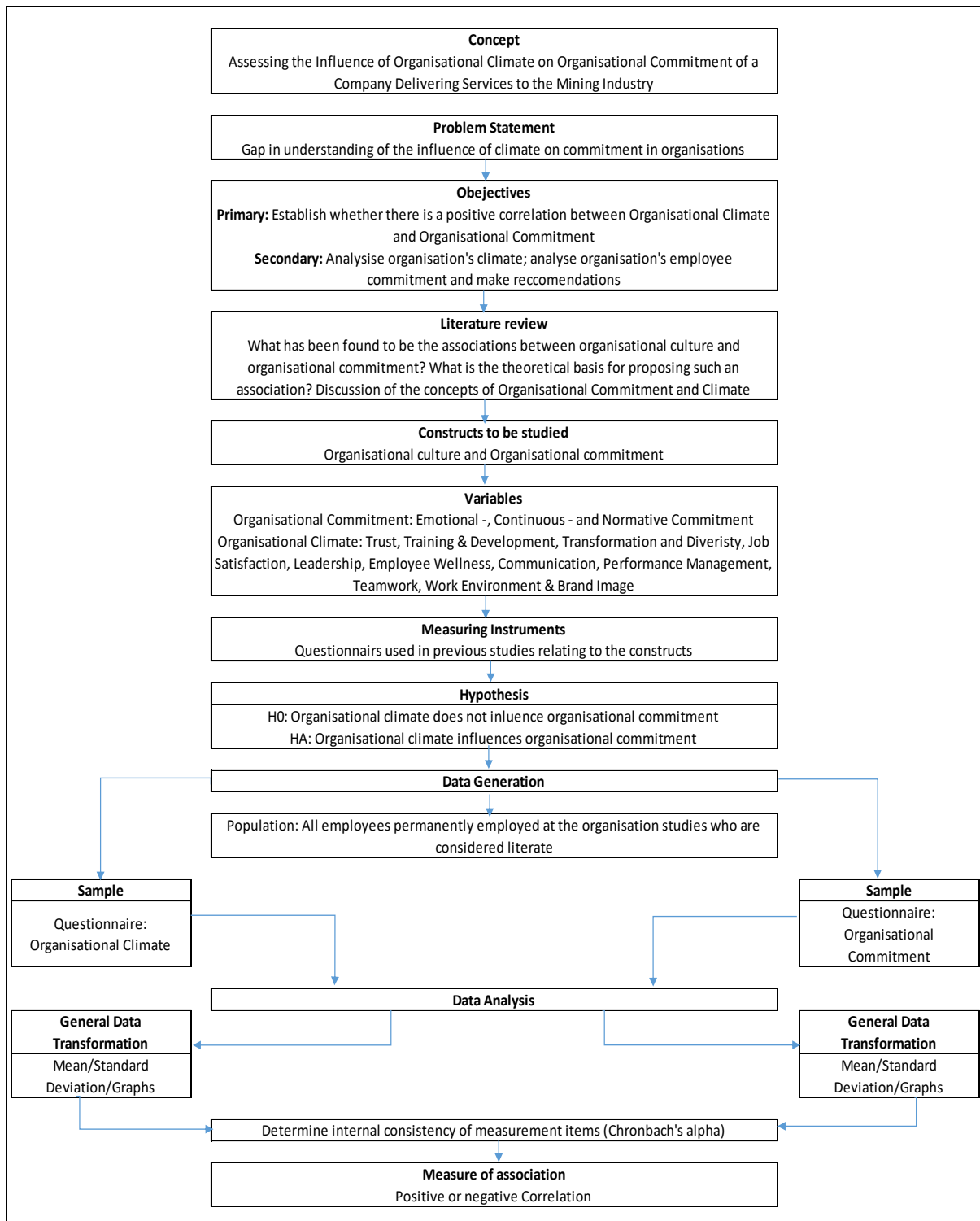
1.6.2.2. Data collection

Questionnaires were distributed to the study population and were described and interpreted using both measures of central tendency and standard deviation as appropriate. Central tendency is a statistical measure to describe the tendency of a group of data to cluster around a central value (Williams, 2015) and a standard deviation measures the spread of the data around the mean (Saunders, 2016). The internal consistency of the measuring items was assessed for the sample using Cronbach alpha and inter-item correlation coefficients.

Research hypotheses were tested based on statistical methods by making use of statistical imports and extraction services. The Statistical Consultation Services of the North-West University was used to statistically analyse the data. The differences in both perceptions of organisational climate and organisational commitment amongst groups (working in different companies in the group, in different departments and management levels) were established by means of an analysis of variance (ANOVA). The ANOVA is used to test for differences in cases where there is more than one dependent variable for a single continuous independent variable (Pallant, 2013) and identifies whether changes in the independent variables have a significant effect on the dependent variables (Oludare, 2014). Specification of relationships between variables was correlational and used Pearson’s correlation methods. Correlation is a measure used to describe the connection between two constructs: in this case climate and commitment (Saunders, 2016). Regression was used to test the correlation

between organisational climate and organisational commitment. Regression analysis is a statistical process that estimates the relationship among two variables (Saunders, 2016). Figure 1.1 below summarises the research procedure followed:

Figure 1.1: Summary of research procedure



1.6.2.3. Sample

The target population for the research consisted of all people permanently employed at the organisation being studied excluding those employees who do not have a grade twelve diploma as these employees might not understand the questions. The population size was 150 employees of which a sample of 92 was obtained. As mentioned in section 1.6.2.1, convenience sampling was used as the population is spread over a large geographical area and due to time constraints.

For the purpose of the study, the sampled individuals needed to meet the below criteria:

- Possess a grade 12 diploma or higher
- Eighteen years and older
- Any gender or race
- Permanently employed at the organisation being studied

1.6.2.4. Measuring Instrument

This analysis and comparison was performed by making use of two questionnaires: Firstly, the TCM Employee Commitment Survey (Allen & Meyer, 2004) was used to measure organisational commitment of each survey participant. The questionnaire consists of eighteen questions, sub-divided into three dimensions, called affective, continuance and normative commitment. Permission to use this questionnaire is free for download if used for academic purposes. A copy of the questionnaire is attached in Appendix A.

Secondly, the Martins' Organisational Climate Questionnaire was used to analyse the organisation's climate. This questionnaire consists of sixty-eight questions sub-divided into eleven dimensions of organisational climate. The dimensions are trust, training and development, transformation and diversity, job satisfaction, leadership, employee wellness, communication, performance management, teamwork, work environment and brand image. Permission was requested by sending numerous emails yet no reply was received. This email is quoted on the original questionnaire. A copy of the email is attached in Appendix B and a copy of the questionnaire in its original form is attached in Appendix C.

The above two questionnaires were combined into one questionnaire, containing both constructs, presented in Appendix D. Each dimension was assessed using a five-point Likert Scale ranging from “Strongly Disagree” to “Strongly Agree”.

1.7. Scope of study

This study focused only on the head office of a South African company delivering services to the mining industry and only analysed the relationship between the constructs: organisational commitment and organisational climate. The organisation’s site operations were excluded from this study due to the geographical spread and time constraints as mentioned in section 1.6.2.3. This implies that the research may not be representative of the entire population of the organisation and for this reason, could exclude important information relating to the organisation as a whole.

1.8. Limitations of the study

Considering that a convenience sample was used due to the large geographical area over which the population is spread and consequent limitations in accessibility, there is a risk of bias introduced by this form of sampling such that the results of the study might misrepresent the population or may lead to incomplete conclusions (Saunders, 2016). The sample was thus taken across various functions of the business, including finance, HR, IT, engineering, procurement and production and represented as much diversity as possible with regards to gender, age and race within the geographical area in order to mitigate these risks.

Some employees might feel the need to complete questionnaires in such a way that they think management might view as favourable responses. Anonymity was thus well communicated to all individuals when distributing the questionnaires. The researcher explained this to the participants personally when the questionnaires were distributed and participants were not required to fill in their names on the questionnaire.

The research topic is sensitive as it discusses issues relating to organisational behaviour, and for this reason, an ethics compliance form was completed with the

North-West University and written approval was obtained from the CFO of the organisation (Refer section 1.10).

1.9. Contribution of the study

The aim of this study was to analyse organisational climate and its impact on employee commitment in an organisation delivering services to the mining industry. If it is found that there is a significant relationship between the two constructs, then the organisation can use the analysis of the current organisational climate to build on the current successes and improve on other areas in order to create a more favourable organisational climate, and in doing so, have a positive impact on organisational commitment. If the research does not find a significant relationship, then it is suggested that a similar study be performed but with a larger sample, covering other areas of the organisation as mentioned in section 1.6.2.3 as well.

Having committed employees can be considered a competitive advantage as a more committed, and hence, more productive workforce has been shown to have a significant positive impact on a company's profitability and performance (Dixit & Bhati, 2012). If this is the case, it can be considered crucial for the management of any company to know what can be considered as a favourable organisational climate as well as establishing the company's current climate. This study aims to provide the management of the organisation with this information to enable them to understand the organisation and its employees better.

Looking at ways to improve productivity and gaining a competitive advantage is particularly important for the organisation in this study, given the prevailing industry conditions in South Africa, which will be discussed in the literature review. The decline in the mining industry in South Africa makes it even more difficult for organisations providing services to this industry to survive. The organisation is presently competing with larger and more established and diversified organisations with better spread of risk across many industries, which in turn provides them access to greater resources, whereas the organisation being studied is largely only focused on the mining industry. Labour relations have been a concern in this industry for some time and have taken a turn for the worst in recent years according to Trevor Manuel, former Minister of Finance (Donnelly, 2014). This study will add to better understanding of the

organisation's human resources and this in view of the strained employee-employer relations prevailing in the industry will be beneficial.

This study will also contribute to the field of organisational climate and employee commitment as no study of this nature has yet been performed in the mining supply service industry in South Africa.

1.10. Ethical considerations

Written consent to conduct the study was obtained from both the COO and CFO of the organisation being studied and is attached as an appendix to this paper (Attached in Appendix E)

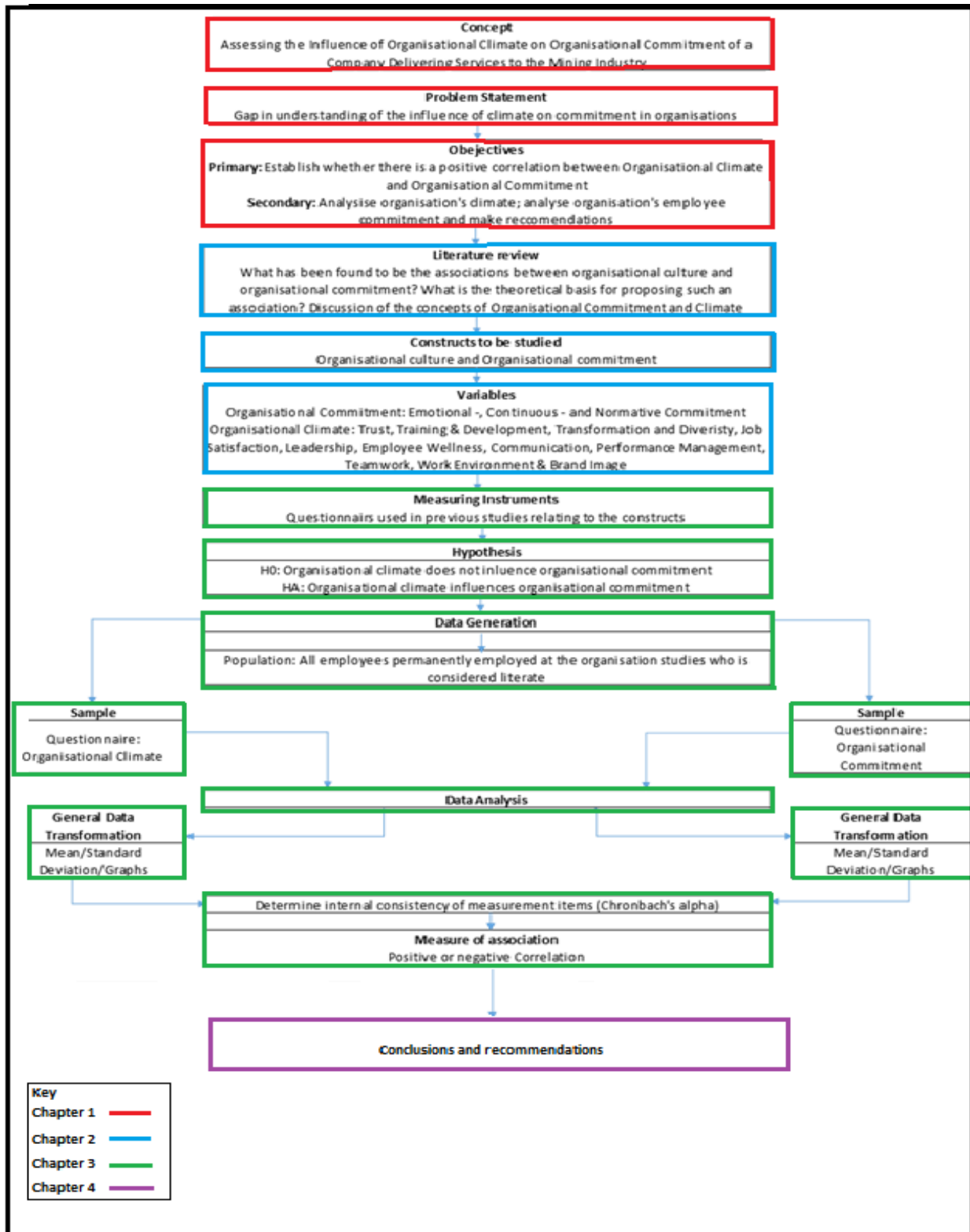
In addition to the above, an ethical application process was followed with the North-West University, which includes the completion of an ethical application form. Ethical number EMSPBS16/02/16-01/32 was obtained and included in the questionnaire.

Respondents retained the right to withdraw from the survey at their discretion without discrimination. That the survey was voluntary was adequately communicated to each participant. Precautions to preserve anonymity were taken, ensuring all results were reported as aggregate data. Keeping the questionnaires anonymous is important as leaking results of individuals might put them at risk of being victimised by management.

1.11. Layout of the study

Figure 1.2 illustrates the chapter layout.

Figure 1.2: Chapter layout



- Chapter 1 – Nature and scope of the study

This chapter begins with a general introduction and follows with a problem statement, objectives of the research, research methodology, limitations of the study and the division of the chapters below.

- Chapter 2 – Literature review

The second chapter provides a theoretical background to the concepts of organisational commitment and organisational climate, defining these constructs, outlining their dimensions and antecedents, finally reviewing what has been found to be the associations between these two. A theoretical basis for proposing an association between the two constructs will then be revealed, the chapter concluding with a suggested integrated model for organisational climate and organisational commitment

- Chapter 3 – Empirical investigation

The third chapter presents the results of the study discussing and interpreting evidence collected. Also, the statistical analysis results will be described and inferences made. Finally, the acceptance or rejection of H₀ will be argued.

- Chapter 4 – Recommendations and conclusion

Chapter four will, based on the outcomes obtained in chapter three, draw conclusions and make recommendations to the management of the organisation being studied and suggest areas for further studies that can be done in this field in the future.

1.12. Summary

The aim of this research was to prove that organisational climate influences organisational commitment in a mining services provider. In this chapter, by introducing the concepts of organisational climate and organisational commitment to be assessed in the context of an organisation providing services to the mining industry, it has been argued that a committed workforce can be beneficial for an organisation and is a competitive advantage where the organisation has a higher than average

productive workforce that uses less resources to perform the same job than competitors do.

If the positive relationship between organisational climate and organisational commitment can be proved for the organisation, then management has a tool it can use to increase its workforce commitment. This chapter has set the background of the study, introducing the concepts as well as briefly outlining the research setting. In the ensuing chapter, a detailed literature review will be conducted that will provide a detailed description of the constructs under study as well as theoretical basis for the proposed association between these constructs.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The aim of this research was to prove that organisational climate influences organisational commitment in a South African company delivering services to the mining industry. This chapter focuses on the theoretical underpinnings of organisational climate and organisational commitment as concepts, introducing these concepts to be assessed in the context of an organisation providing services to the mining industry.

The chapter begins with an overview of the mining sector's employment conditions and performance, and compares this to that of the organisation being studied. The next section discusses organisational climate, reviewing the multiple definitions of the concept, followed by a discussion of the antecedents of organisational climate and providing a distinction between organisational climate and organisational culture. A discussion of the dimensions of organisational climate then follows, presenting a model for organisational climate and culminating in a discussion of the importance of a positive organisational climate to an organisation. Organisational commitment is discussed next, defining the concept, and its dimensions before discussing Meyer's three-dimensional model of organisational commitment (affective, normative and continuance) and closes off with a discussion of the importance of committed employees to an organisation. The final section of the chapter reviews previous studies regarding the relationship between organisational climate and organisational commitment and concludes by proposing a model for the relationship between these two constructs.

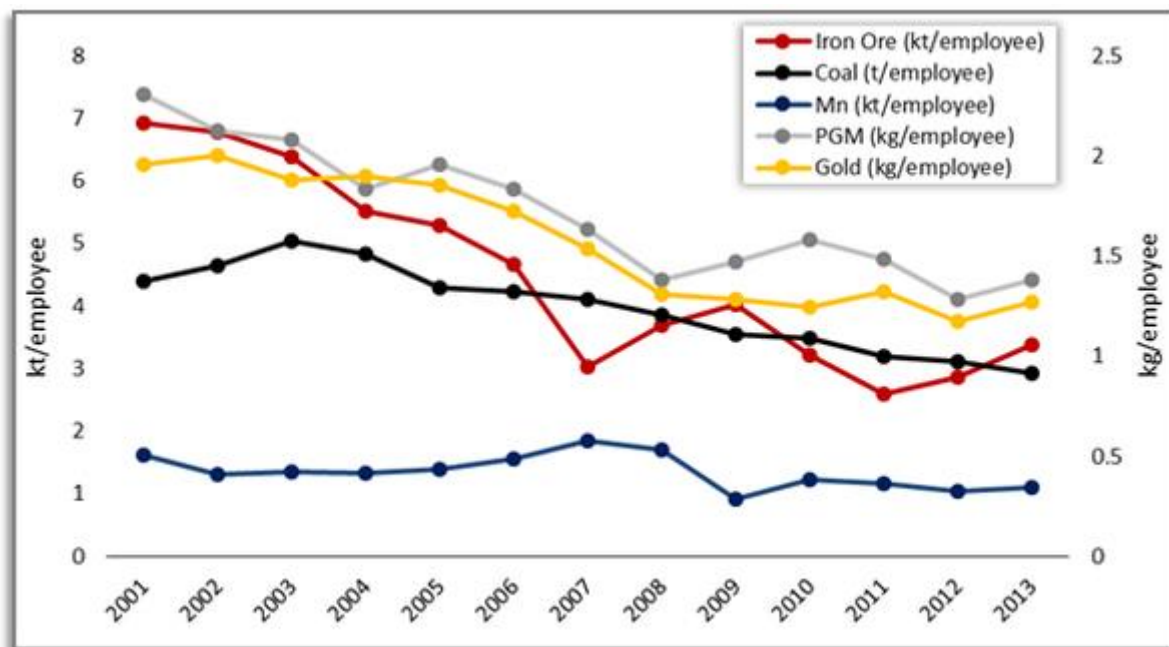
2.2. Industry overview

The industry overview focuses on describing the South African mining industry's performance issues. In the problem statement of chapter 1, it was mentioned that the mining industry in South Africa has seen a decline in labour productivity (De Vries & Erumban, 2015). In addition to this, the sector experienced an intensified demand for

higher wages, increased number of industrial strikes as well as worsening labour relations between employees and management (Mitchell & Steen, 2015).

The industry has seen an increase in average earnings of 43% from 2011 to 2015 (or 11% annually), yet production and commodity prices had declined in the same period (Schwikkard, 2016). When adjusting for inflation, earnings have increased with 5% annually since 2005 (Schwikkard, 2016). Figure 2.1 and figure 2.2 below illustrate negative productivity trends in the sector.

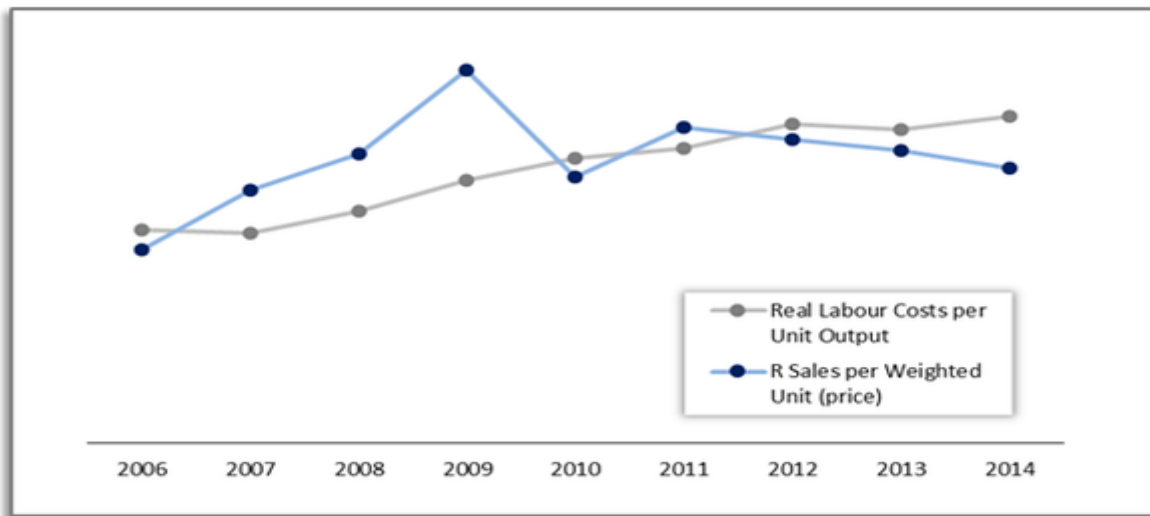
Figure 2.1: Output per employee in relevant measure



(Source: Schwikkard, 2016)

Figure 2.1 indicates that employee output (as a percentage of kilogram output) has declined by an average of 2.9% per year since 2001.

Figure 2.2: Labour cost per unit of output and average sales per unit of output

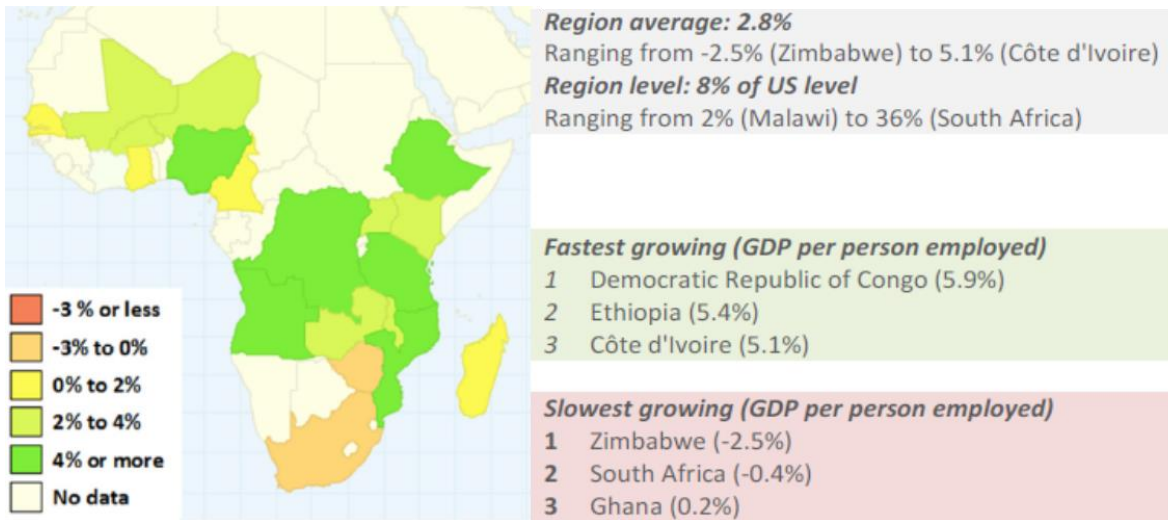


(Source: Schwikkard, 2016)

Figure 2.2 illustrates that labour cost per kilogram had increased by 4.2% per year, indicating that employee cost have been increasing, while labour productivity declined.

Figure 2.1 and 2.2 illustrate a significant problem in the industry in South Africa according to Swchikkard (2016) because this trend indicates a loss in profitability as revenue per employee decreases while cost per employee increases. This trend has a direct impact on the bottom-line of mining companies already struggling to make a profit according to Swchikkard (2016).

Figure 2.3: Productivity Performance from 2011 to 2014 Africa

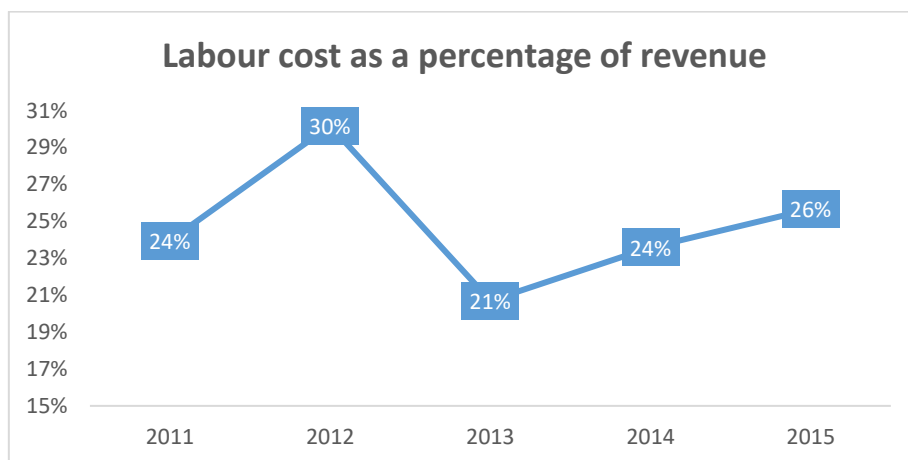


(Source: De Vries & Erumban, 2015)

Further evidence of a decline in productivity can be seen in figure 2.3, indicating a reduction in labour productivity in the Sub-Saharan Africa, including South Africa from 2011 to 2014.

The organisation in this study is operating in this industry and have experienced similar trends recently, but to a lesser extent. Labour cost as a percentage of revenue has risen steadily from 2013 on average of 2% per year when looking at figure 2.4 below.

Figure 2.4: Labour cost as a % of revenue



(Source: Own compilation)

The organisation has seen an increase in employee productivity in 2013. This is the year after the company listed on the Johannesburg Stock Exchange. However, productivity steadily declined every year since then. In addition to this, the organisation has also experienced its first industrial strike in the organisation's history in 2016. Strikes have become synonymous to the mining industry, especially since 2012, when the Marikana strike occurred, which subsequently led to a decline of 6.5% in the mining sector in South Africa (Mining Review Africa, 2014).

The organisation in this study is competing in an industry which is fragmented, where organisations compete on the basis of various factors, including price, efficiency, accuracy, safety, reliability, technology and experience (Lemmer, 2013). The organisation has performed consistently well since its incorporation 25 years ago and doubled revenue from 2012 to 2015, exceeding its targets for this period. This is compared to two of the organisation's main competitors, who suffered a reduction of revenue of 3% and 62% respectively during the same period. Management have ambitious growth plans for the future of the organisation which, if successful, will increase the market share of the organisation considerably. The management of the organisation in this study are investigating ways to improve profitability and increase productivity in order to meet their targets set to investors and to gain a competitive advantage. One way to increase profitability is to reduce costs by increasing productivity of inputs (Fuller, 2016). Management has done a great deal with improving the productivity of the equipment by focusing on technology and automisation.

Management has turned their focus on employees by attempting to identify potential issues that they might have with their work and with management and actively communicating the company's strategy, endeavouring to increase morale and employee productivity. According to Mguqalwa (2008), Nehmeh (2009) and Dixit (2012), labour productivity can be increased if employees are committed. This study will be helpful for the organisation as it can assist management to better understand the organisation's climate and commitment. If proven that organisational climate influences organisational commitment, management can endeavour to establish a more favourable climate as a tool to increase commitment which in turn will produce a more productive workforce.

2.3. Organisation profile

The organisation in this study provides various drilling services to the mining industry mainly in Africa and South America. The organisation was listed on the Johannesburg Stock Exchange recently and the organisational structure consists of various subsidiaries. This study focuses on the head office of the organisation's South African operations. The head office area consists of mainly four subsidiaries: shared services (Subsidiary A), technical and engineering services (Subsidiary D) and two operations organisations (Subsidiary B & C) and has a diverse departmental spread, ranging from administration activities to warehousing and procurement. The operational activities of the organisation is spread over a large geographical area of various sites, some of which are remote.

2.4. Organisational climate

According to Gupta and Parikh (2010), organisational climate accounts for up to 30% of variances in key business performance measures. Organisations that are able to establish a work environment where employees believe they are valued and can reach their full potential have a distinct competitive advantage according to Dobre (2013). Castro (2010) found that employees were more energised and productive when certain working environments are present and that these employee characteristics lead to greater customer satisfaction and better long-term organisational business performance. These working environments (or dimensions of organisational climate) is discussed later in this chapter. Organisational climate has a significant impact on the organisation in that it influences the way employees communicate with each other, how the organisation solves problems and learns and how motivated, efficient and productive employees are (Rahimic, 2013). Change in organisational climate over longer periods of time can change organisational culture (Rahimic, 2013). Having a favourable culture is a competitive advantage because it cannot be copied by competitors as it is intangible and embedded in the organisation's structure.

2.3.1. The organisational climate concept

There is over fifty years of research performed on organisational climate (Castro, 2010). This vast amount of research has produced many definitions of the concept and little consensus of how to measure it in an organisation. There is consensus, however, that organisational climate (OCL) is based on reality in the sense that employees within an organisation have a collective perception of the climate and that this climate influences the behaviour of individuals (Castro, 2010).

Organisational climate (OCL) summarises the collective perception held about the organisation and it is “personalistic” in the sense that it is a way an individual perceives an organisation and is independent of how others describe the organisation (Schnieder, 1975). Moran and Volkwein (1992: 20) defined OCL as a:

“relatively enduring characteristic of an organisation which distinguishes it from other organisations and:

- embodies members’ collective perceptions about their organisation with respect to such dimensions as autonomy, trust, cohesiveness, support, recognition, innovation and fairness;
- is produced by member interaction;
- serves as a basis for interpreting the situation;
- reflects the prevalent norms, values and attitudes of the organisation’s culture; and;
- acts as a source of influence for shaping behaviour.”

Tricklebank (2010) stated that OCL is the surface display of the organisation’s culture that is a shared perception held by individuals employed at the organisation at any given point in time about fundamental elements of the organisation and can affect the behaviour of employees when it comes to organisational effectiveness.

Castro (2010) defined organisational climate as “employees” perceptions of the events, practices, and procedures and the kinds of behaviours that are rewarded, supported and expected. Organisational climate therefore deals with the perceptions of employees regarding important work-related aspects of the organisation’s values. Organisational climate has been demonstrated to have a strong influence on individual and group behaviour within an organisation. Organisational Climate (OC) has also

been defined as an emotional output and refers to the perception of the beliefs, expectations and attitudes held by individuals and groups about the organisation at a certain point in time (Verwey, 2010).

2.3.2. Distinction between organisational climate and organisational culture

Organisational climate and organisational culture has been used interchangeably and researchers often treat the two concepts as if they were identical (Castro, 2010). Castro (2010) argues that the two concepts are indeed similar in the sense that both describe employee experiences and assists researchers and managers to understand the psychological phenomena that exists in organisations. Furthermore, the author argues that both concepts provide clarity on how organisations influence employee behaviour, attitudes and well-being and provide reasons on why some organisations are more prone to adapt to change and be more successful than others. There are however, some differences between the two concepts.

Schneider (2013) attempted to differentiate climate and culture by stating that organisational climate relates to events and experiences and represents the patterns of behaviour of employees, whereas organisational culture sheds light on why employees believe these patterns of shared values, common assumptions and beliefs exist. Also, organisational culture relates to the foundations of an organisation's beliefs, values and assumptions, while climate relates to a "snapshot" of a specific time in the organisation and is measured by a range of dimensions.

Schneider (2013), argued that organisational culture and climate are both similar yet distinct. Climate and culture are similar in the sense that both are components of the expressive, communicative, socially constructed dimensions of organisations, with climate being a visible concept, while culture refers to an underlying, unspoken element of organisations. While research suggests that organisational culture influences organisational climate, it is pertinent to maintain the conceptual distinction between these two constructs.

Table 2.1 summarises the main differences between organisational climate and – culture as indicated by Castro (2010); Schneider (2013), and MacNiel *et al.* (2009).

Table 2.1: Summary of the differences between organisational climate and organisational culture

Organisational Climate	Organisational Culture
<ul style="list-style-type: none"> • Stems from social psychology • Main concern is to understand and separate attributes relating to the organisation’s internal environment by analysing individuals’ perceptions • Exists in a specific period of time in organisation • Shallow in the sense that the concept attempts to understand the individual’s consciousness and organisational realities. It is more discernible and derives from a value and attitudinal perspective • Evolves quickly and changes more rapidly • Individual characteristics are noticeable • Quantitative methodology is used 	<ul style="list-style-type: none"> • Has its roots in the anthropology field? • Main concern is to analyse the rituals, myths and symbols which lead to shared values, norms and meanings in groups. • Long-lasting characteristic of the organisation • Also derives from a value and attitudinal perspective but at a deeper level of assumptions. It is less visible and is preconscious in the individual • Evolves at a glacial pace and is difficult to change • Collective characteristics are displayed • Qualitative methodology is used

(Source: Own compilation)

Castro (2010) identified some similarities between the two concepts, arguing that both concepts relate to the internal psychological environments in organisations taking into account the shared, holistic and collective social contexts of organisations over a period of time. The origins in an organisation’s system of beliefs, values and

assumptions, and their definition of the social context as one of individual interaction and influencing individual interaction further point to the similarity of these concepts.

2.3.3. Approaches of organisational climate

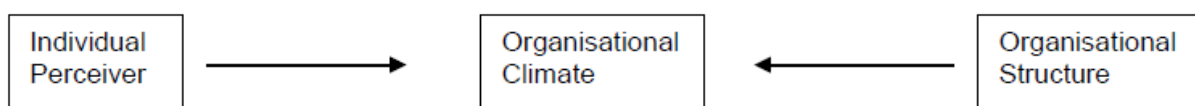
Organisational climate was defined in section 2.2.1 of this chapter, yet the concept is better understood when discussing how it is formed (Schneider, 1983). Schneider (1983) questioned the formation of a homogenous perception of an organisation by employees who are influenced by numerous individual stimuli in their work environments.

This question is answered by taking a closer look at four approaches to the formation of climate: the structural-, perceptual-, interactive- and cultural approach.

- Structural approach

This approach describes organisational climate as an attribute of the organisation; it is inherent to the organisation and exists independent of the perceptions held by individuals employed at the organisation (Soliz *et al.*, 2014). The structural approach argues that organisational climate is a result of factors that are unique to the organisation's work environment, such as its size, authority structure, levels of hierarchy, technological advancement and other factors such as policies and procedures (Castro, 2010). Schneider (1983) referred to this as the structural approach. Figure 2.5 (Morgan and Volkwein, 1992: 24) provide a visual presentation of the structural approach and from this it can be inferred that organisational structure leads to organisational climate and this climate is then perceived by individuals employed by the organisation.

Figure 2.5: Structural Approach to Organisational Climate.



(Source: Castro, 2010)

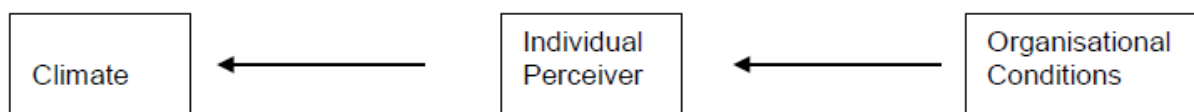
There are three criticisms of this approach, however. Firstly, this approach fails to factor in that organisational structure is not equally experienced amongst individuals and therefore does not take the different sub-climates perceived by different workgroups in the same organisation into account (Bitsani, 2013). Second, this approach states that climate is derived from the structure of the organisation, but does not indicate the relationship between structure and climate (Bitsani, 2013). Finally, the structural approach does not consider the differentiated subjective reactions of individuals who are exposed to the same organisational structure (Soliz *et al*, 2014).

- Perceptual approach

This approach states that organisational climate is derived from the individual and is therefore in direct contrast to the structural approach (Bitsani, 2013). It means that individuals react to various characteristics of a situation in a manner that is meaningful to that individual and, therefore, climate has a subjective meaning which is independent of organisational structure (Soliz *et al.*, 2014).

Morgan & Volkwein (1992: 25) offered a visual representation of the perceptual approach to organisational climate (see: Figure 2.6). From this it can be concluded that individual perceptions about an organisation are formed as a result of their exposure to their experiences of the organisation's conditions.

Figure 2.6: Perceptual Approach to Organisational Climate.



(Source: Castro, 2010)

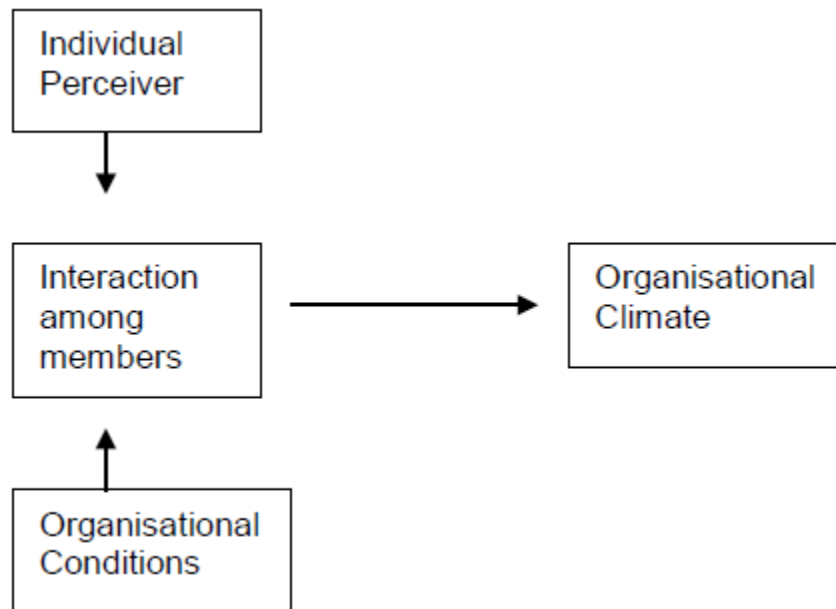
Two criticisms on the perceptual approach are offered by Bitsani (2013). First, if climate is derived from the individual and not from both the individual and the organisation, as this theory states, then it cannot be regarded as an organisational characteristic. Second, this theory assumes that it is individuals who bring meaning to organisational processes and not by means of interaction with members of the organisation.

- Interactive approach

This approach combines the two approaches above and argues that climate is created by a combination of both individual perceptions (subjective) and organisational structure (objective) (Soliz *et al.*, 2014). Organisational climate is created when individuals interact with one another about their situation and these interactions results in a shared agreement between the organisation's members (Castro, 2010). Thus, communication is a key contributor to organisational climate.

Figure 2.7 (Morgan & Volkwein, 1992: 28) below illustrates this interaction between organisation members and how this shared interaction results in climate. It also illustrates the combination of the structural and perceptual approach in that individuals gain meaning by intentionally interacting with objects and other members of the organisation (Bitsani, 2013).

Figure 2.7: Interactive Approach to Organisational Climate.



(Source: Castro, 2010)

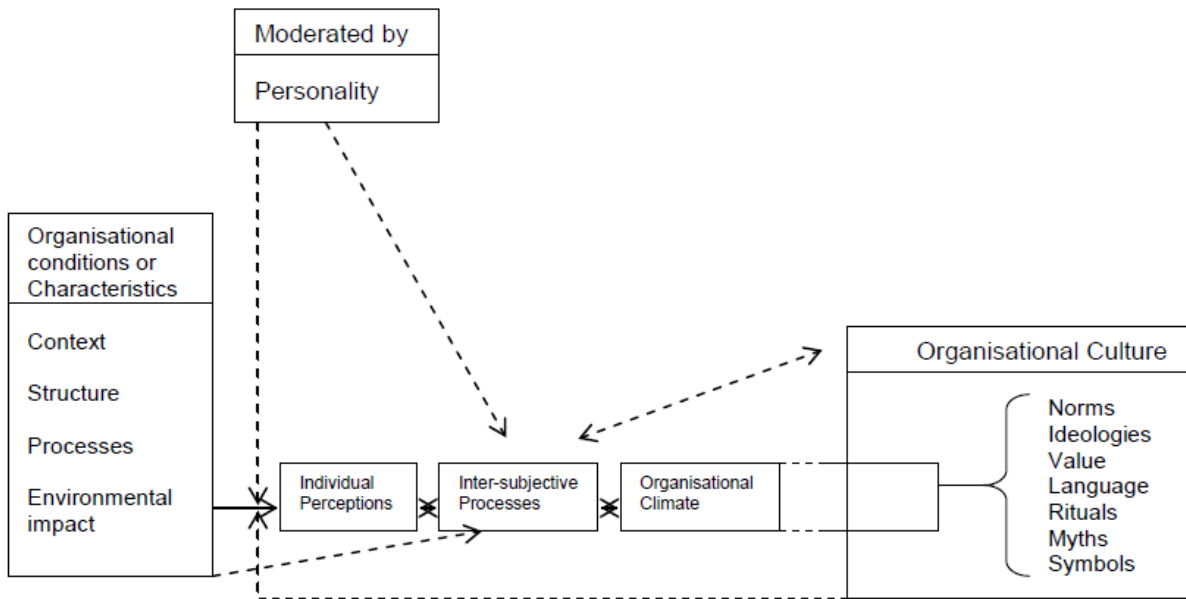
One criticism of this approach is that it does not contextualise the role of social interaction or organisational culture in forming interaction. It only deals with the cognisance of the interactions of members in the organisation (Castro, 2010).

- Cultural approach

This approach ignores individual perceptions, organisational structure and how they interact and argues that organisational climate is shaped by organisational culture (Soliz *et al.*, 2014). It argues that climate is formed by groups of individuals who share a common frame of reference and interact with one another as they deal with organisational demands (Soliz *et al.*, 2014). This approach shares the interaction concept of the interactive approach but includes organisational culture as a factor that shapes organisational climate (Castro, 2010).

Figure 2.8 (Morgan & Volkwein, 1992:32) below illustrates that organisational climate is part of organisational culture. Individual perceptions about organisational conditions are formed by a combination of an individual's own personality, reasoning and inter-subjectivity which stems from interaction with other individuals (Castro, 2010). This has an impact on organisational climate. Organisational culture also influences climate in the sense that it influences the perceptions of individuals as well as the social interaction between members of the organisation (Castro, 2010). This means that organisational culture influences interaction between individuals, which influences climate and can influence the culture.

Figure 2.8: Cultural Approach to Organisational Climate.



(Source: Castro, 2010)

To summarise, organisational climate is formed by interaction between individuals who share a common frame of reference which is based on a shared exposure to the same organisational conditions and is not influenced by organisational structure, nor by individual perceptions, but rather by interaction between members of an organisation and organisational culture (Castro, 2010). The next section will discuss the dimensions of organisational climate, which forms part of the organisational conditions individuals are exposed to.

2.3.4. Dimensions of organisational climate

Castro (2010), postulated that there is much debate about the definition of organisational climate. This can also be seen in section 2.3.1 which deals with multiple definitions of organisational climate. The same applies with the measurement of the topic. Many reasons for this debate have been provided by various authors of organisational climate (Hannevik, 2014). Castro (2010) compared the dimensions in many studies (Wiley, 2000), (Gerber, 2003), (Schneider, 1975), (Litwin, 1968) and found that many of these dimensions overlap.

The dimensions used for the purpose of this study have been developed by a reputable external consultancy firm (refer to Section 1.6.2.4 in Chapter 1) to be used specifically in a South African context. The dimensions of organisational climate (Castro, 2010) will now be discussed and will be summarised in Table 2.2.

- **Trust**

Trust encompasses an individual's (employee) willingness to be vulnerable to another individual's (manager or leader) actions. This willingness is based on the expectation that a manager will perform in a manner that will lead to a positive outcome for the employee, whether the employee can control the actions of the manager or not (Moolenaar & Slegers, 2010). According to DeConinck (2011), trust possesses three characteristics: ability (the capability of a manager that enables him or her to exert influence over an employee), benevolence (the extent to which the employee is motivated to assist the manager), and integrity (the belief that the employee adheres to a set of principles that the manager finds reasonable).

- **Training and development**

Training can be defined as planned and systematic activities that are aimed at the acquisition of skills and knowledge by means of instruction, demonstration, practice and timeous feedback on performance (Bashir & Jehanzeb, 2013). Acquired skills and knowledge are aimed at creating sustainable changes in behaviour and reasoning in employees that enable them to perform their tasks competently (Kraiger *et al*, 2012). Training and development activities allow organisations to produce a workforce that innovate their products or services, reach goals and compete in a constantly changing environment (Kraiger *et al.*, 2012).

- **Transformation and Diversity**

Diversity climate refers to management practices that create an environment which provides equal access to opportunities and fair treatment, irrespective of the identity of the employee (Joshi & Roh, 2013). This climate also depends on employee perceptions that management values diversity, as well as the extent

to which employees of all backgrounds are encouraged to contribute to the success of the organisation (Joshi & Roh, 2013).

- **Job satisfaction**

Job satisfaction refers to the degree of satisfaction employees experience in terms of their job-required tasks, their work environment and the reward they receive for performing job-related tasks (Soltani & Taboli, 2014).

- **Leadership**

Leadership refers to a process where a manager or leader models certain values, beliefs and behaviour which, in turn, encourages self-awareness and self-regulated positive behaviours in others (Skwarek, 2016). According to Riggio (2014), leadership encompasses four components: self-awareness (knowing one's own values, strengths and limitations), rational transparency (being genuine with others), balanced processing (plans are executed and communicated effectively) and internalized moral perspective (acting in an ethical manner).

- **Employee wellness**

Employee wellness involves management supporting employees to separate their professional and personal lives, by ensuring that policies and procedures exist, like offering flexible work schedules, hosting family events sponsored by the organisation and paid leave, to enable employees to lead balanced lives (Heathfield, 2016).

- **Communication**

Communication entails verbal, non-verbal and written interaction between individuals of the organisation (Basset, 2014). Basset (2014) states that effective communication assists the organisation to reach objectives, enables employees to deliver on their responsibilities and is a tool to create transparency within the organisation. Communication requires trust, relationships, control and delegation in order to be effective (Basset, 2014).

- **Performance management**

Performance management refers to a measuring process where feedback is provided, employees are held accountable and documentation is processed regarding an employee's performance (Gallant, 2012). The degree of employee satisfaction with performance appraisals depend on four criteria. Firstly, the appraisal process (informing employees on the appraisal process and why it is held supports employee satisfaction with performance appraisals). Secondly, the appraisal interview (employees tend to have higher job satisfaction if performance appraisals are utilised for developmental purposes, rather than as an evaluation platform). Thirdly, the appraisal outcomes (for example, pay increases for good performance) and finally, fairness (appraisal process needs to be procedurally fair and consistent for all employees) (Katavich, 2013).

- **Teamwork**

Teamwork entails a process where a group of people work together in order to achieve a common goal (Noordin *et al*, 2010). Teamwork comprises five components called communication, cooperation, coordination, respect and work climate (Bengel *et al.*, 2015).

- **Work environment**

A work environment that lures potential employees to the organisation, encourages employees of the organisation to remain with the organisation and enables them to perform effectively can be described as a favourable work environment (Oswald, 2012). Work environment is divided into two components called physical (how an employee connects with the office environment) and behavioural (how an employee connects with other employees in the office) environment (Oswald, 2012).

- **Organisation image**

Organisation image refers a combination of the sum of the perceptions of employees who are working at the organisation based on their experiences and judgements (perceived organisational identity) and judgement from external stakeholders of the organisation (construed external image) (Lee *et al.*, 2015). Lee *et al.* (2015) state that the perception that employees have of the

organisation's image influences employee motivation, work behaviour and performance.

Table 2.2: Dimensions of Organisational Climate

Dimension	Description
Trust	Employee's degree of trust in the organisation's management and managers and the feeling that managers are open and honest
Training & Development	Training initiatives obtained from the organisation, as well as the satisfaction and availability of training plans. Employee awareness of mentoring and coaching programs and what criteria employees have to comply with in order to get promoted
Transformation & Diversity	Perception of the equality of treatment by management when it comes to the organisation's personnel as well as understanding, acceptance and support of transformation strategy and initiatives
Job Satisfaction	How positive employees feel about their future with the organisation and whether tasks are challenging and interesting. Additionally, the perception of how much the organisation cares for its employees and whether it retains well-performing employees
Leadership	Ability of managers to manage and lead, how they behave and their competence
Employee Wellness	Support provided to employees to balance work and social life, and indicates the level of stress
Communication	Communication regarding issues affecting the company as well as manager's ability to listen to staff, share information and clarify misunderstandings
Performance Management	Satisfaction regarding job or role evaluation and recognition received
Teamwork	Belonging and fit to the team and organisation. Refers to team dynamics and decision-making
Work Environment	Quality of equipment and technology, physical work and environment
Image of the Organisation	Feeling of pride to be associated with the organisation

(Source: Castro, 2010)

These dimensions exist at three levels of organisational climate which will be discussed in the next section.

2.3.5. Levels of organisational climate

The definitions of climate by various researchers in section 2.2.1 inclines the idea that climate exists at different levels. Verwey (2010) provided empirical evidence that support this notion. There are three levels of organisational climate called organisational-level, group-level and psychological-level climate.

- **Organisational-level Climate**

According to Adenike (2011), organisational climate manifests at organisational level as the foundational values, beliefs and expectations collectively held by employees in an organisation at a certain point in time about how effectively subsystems and processes function to produce outputs.

Organisational climate can exhibit attributes of organisational culture, depending on how well organisational culture is articulated, the amount of coherence it exhibits and how effectively it is shared through interaction between individuals of the organisation (Putter, 2010). Organisational-level climate stipulates appropriate behavioural guidelines and goals for various group climates, which is the next level of organisational climate.

- **Group-level Climate**

Verwey (2010) argues that sub-climates exist for various organisational groups due to the variability of tasks performed and job functions. Organisational-level climate sheds light on different climates between various organisations, and group-level climate relates to various sub-climates that may exist within one organisation as a result of differences in practices and procedures within a group in the organisation (Putter, 2010). Differences in group climates within the same organisation can occur due to differences in practices and procedures relevant to different groups within an organisation, as well as differences in supervisory styles (Putter, 2010).

Group-level organisational climate is particularly important according to Verwey (2010) as it is at this level where climate transforms from being an individual climate to being a collective phenomenon shared by individuals in a group.

- **Individual-level Climate**

Individual-level psychological climate of organisational climate refers to the psychological perceptions an individual form as a result of interaction of the individual with the group-level climate and manifests as individual behaviour towards the organisation (Verwey, 2010). Individual-level climate only becomes important for an organisation once the individual begins to display behaviour based on his or her individual psychological climate.

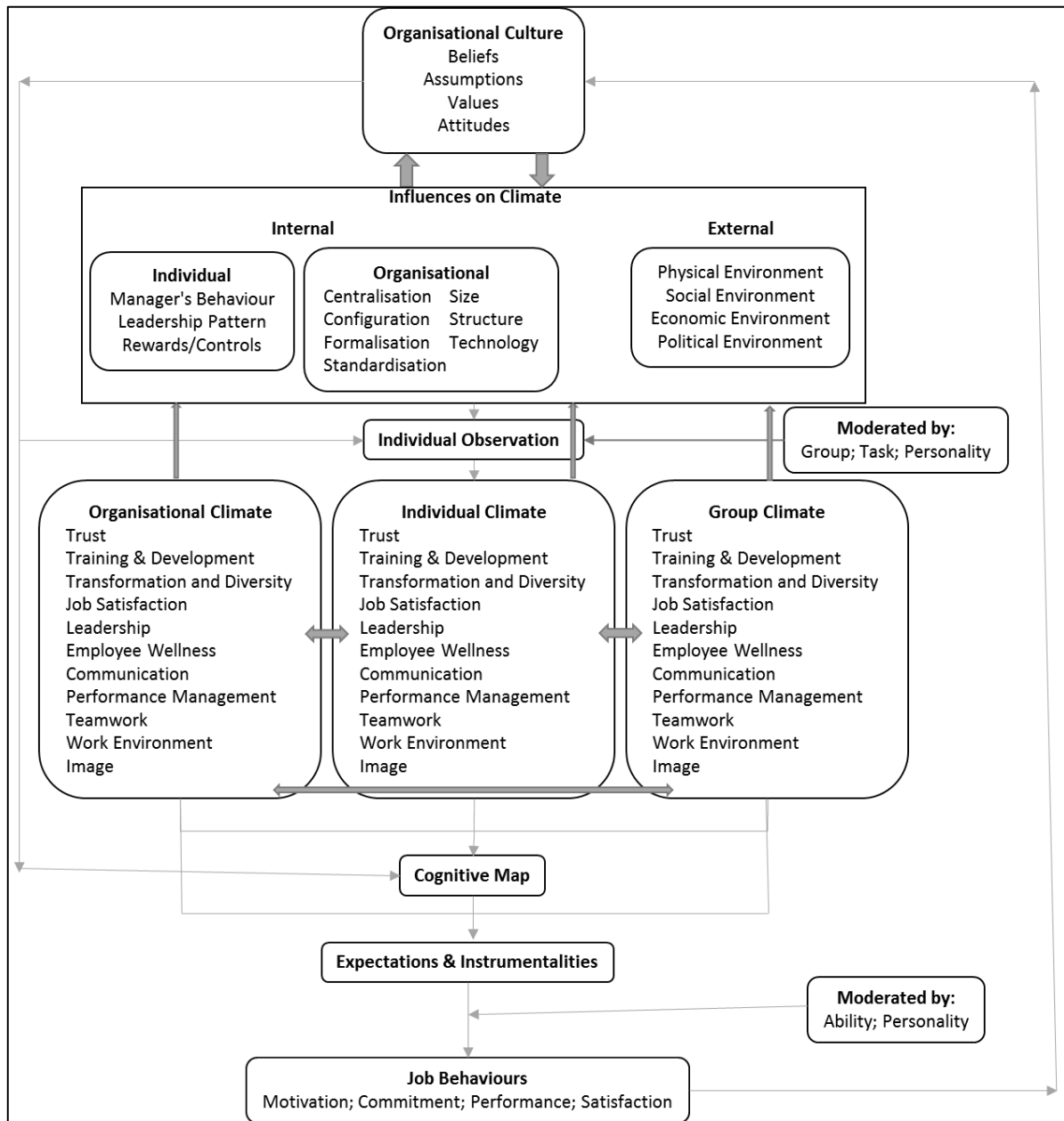
Organisation climate stems from individual-level climate and becomes collective when similar individual perceptions are held by multiple individuals who interact with each other within a group in the organisation (Kuenzi & Schminke, 2009).

2.3.6. Organisational Climate Model

This section integrates all the previous sections in order to gain a deeper understanding of organisational climate. Castro's (2010) model of organisational climate is important as it illustrates the relationship between organisational climate and important variables, includes the various influences on climate, differentiates between the three levels of climate and considers moderating factors that describe job-related behaviour and attitudes.

Castro (2010) also incorporates the relationship between organisational culture and climate and the influence culture has on climate. Figure 2.9 below illustrates Castro's model of organisational climate.

Figure 2.9: Organisational Climate Model



(Adapted from Castro, 2010)

Castro (2010) illustrates in the organisational climate model how both internal and external factors influence climate, dividing the influences into three categories called

individual feelings formed by observation (perception), which are moderated by the group of which the individual is a member as well as the external environment.

The model accommodates the relationship between the concept of organisational culture and organisational climate, as well as how culture and climate influence each other.

Castro's (2010) model depicts both internal (organisational and person), and external aspects which influence an individual's perception and attitude (individual observation) towards the three levels of organisational climate. An individual's perception and attitude is moderated by the group the individual belongs to, as well as the individual's task personality and internal and external influences, which are a function of the individual's perception about quasi-social, quasi-physical and quasi-conceptual (Soliz *et al.*, 2014).

Organisational, group and individual climate are expressed in terms of climate dimensions, which were discussed in section 2.2.4 above, and will be used to describe the state of organisational climate for the purpose of this study. Individual climate plays the most prominent role of the three levels of climate in this model as it directly influences the individual's cognitive map (Castro, 2010). Individual, group and organisational climate interact with each other due to the interaction between individuals and groups and together influence job behaviours such as organisational commitment (Verwey, 2010).

The three levels of climate (organisational, group and individual) are influenced by internal and external factors. The levels of climate interact with one another and all play a role in influencing job behaviours such as employee commitment (Castro, 2010).

An individual's cognitive map is developed by means of the process explained above, but can still be changed by the organisation's culture, as it is shared and accepted by group members (Putter, 2010). In its simplest form, individual-level climate (and not necessarily group or organisation-level climate) and organisational culture will lead to the development of expectations and instrumentalities (Verwey, 2010). Expectations and instrumentalities are moderated by an individual's personality and abilities which lead to certain job behaviours, such as commitment and motivation (Castro, 2010).

Verwey (2010) explains that all three levels of organisational climate can exist simultaneously and have an integrated impact on expectations and instrumentalities. The degree of interaction between organisational and group level climate with that of individual climate, and the consequent joint influence of expectations and instrumentalities depends on the degree of consensus. The degree of consensus depicts the predictive power of the climate factors (Castro, 2010).

Finally, these job behaviours influence organisational climate as it influences the cognitive map and are fed back into and influence organisational culture which, in turn, changes the values, beliefs and assumptions of the organisation (Castro, 2010).

2.3.7. Importance of Organisational Climate

As organisational structures are becoming more complex and competition increases globally, it has become more important than ever to have a positive organisational climate as evidence suggests that this improves employee satisfaction and increases productivity levels (Blair, 2012). A study of organisational climate is especially important in the context of the South African mining industry, because of a number of weaknesses, including poor labour market efficiency, high employee turnover rates and rising employee-employer tensions (Eustace, 2014). These weaknesses were discussed in section 2.1. According to Eustace (2014) it is essential to improve organisational climate in order to improve productivity, market share growth and profitability.

Castro (2010) found a significant relationship between job satisfaction and organisational climate. Govender (2016) found a significant positive relationship between organisational climate and customers' perceptions of service quality. Castro (2010) stated that climate assists managers to understand the relationship between the processes and practices of the organisation and the needs of employees. When managers understand this relationship, they will be able to comprehend what motivates employees and would act in a manner that establishes a positive climate which, in turn, leads to organisational success.

The next section will discuss organisational commitment.

2.5. Organisational commitment

This section of chapter two will discuss the concept of organisational commitment and starts with defining organisational commitment, followed by a discussion of the dimensions of the concept and concludes with a discussion of the importance of OC.

The core of many management strategies is to get their employees involved in the organisation's mission and vision (Anderson, 2014). Managers have studied employee emotions and expectations and have exerted a lot of energy into meeting the expectations of employees' needs in order to reach a win-win position where employees are committed and in turn assists in reaching the organisation's goals (Anderson, 2014). Anderson (2014) states that the above requires an improvement in leadership and organisational climate.

2.4.1. The organisational commitment concept

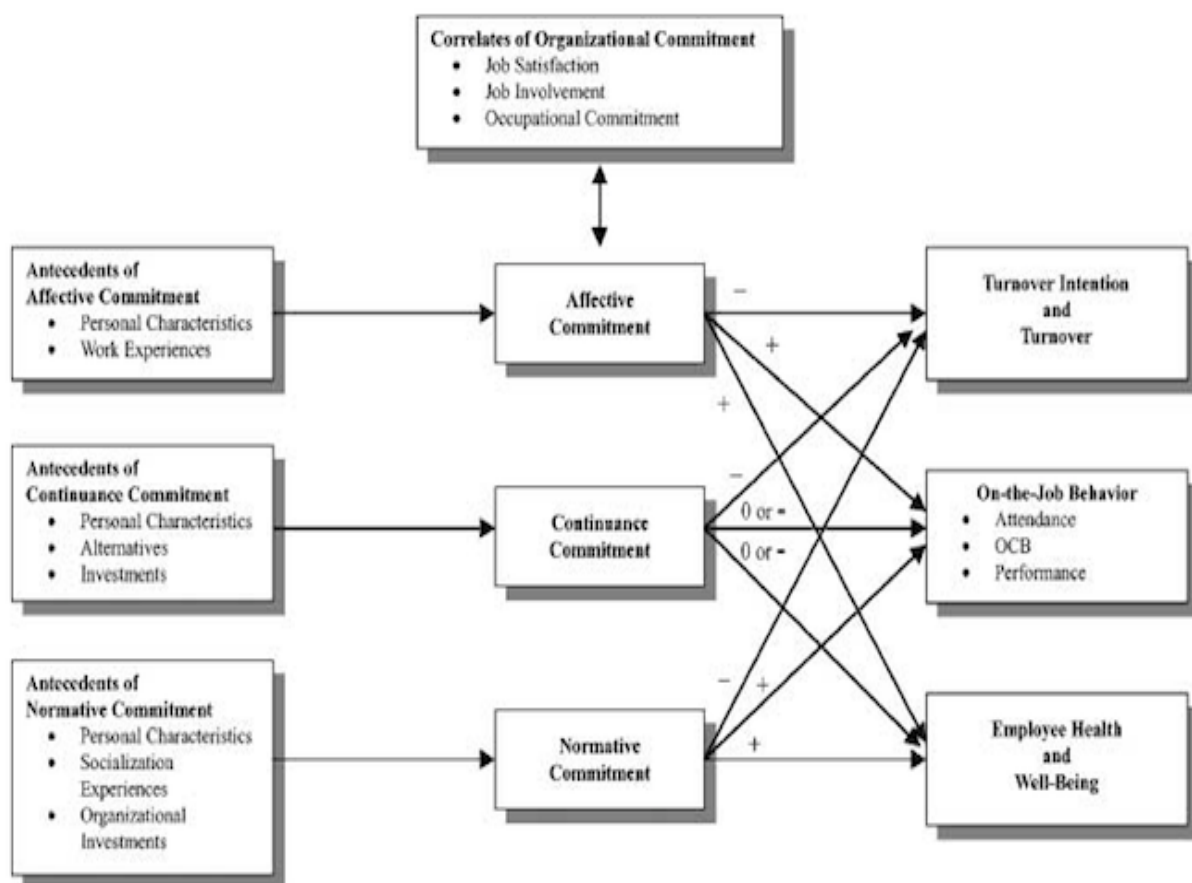
According to Meyer and Allen (2004) commitment is a psychological state that characterizes the employee's relationship with the organisation and has implication for the decision to continue membership in the organisation. In other words, organisational commitment (OC) is a concept that describes the link between an individual and the organisation (De Clercq, 2007). Dixit and Bhathi (2012) described a committed individual as someone who firmly believes and accepts the goals and values of an organisation and will apply significant effort on the organisation's behalf. Allan *et al.* (2010) describes OC as the strength of the attachment an employee feels towards an organisation and can be measured by the degree to which individuals adapt themselves to the values and goals of the organisation and the degree to which an employee fulfils his or her duties and responsibilities.

Therefore, it can be argued that OC is different from motivation or general attitudes as a committed employee can behave in a way that might seem as being in contrast to self-interest from the perspective of a neutral observer (Dixit & Bhathi, 2012). It is a desire, need and obligation to remain with the organisation.

2.4.2. Dimensions of organisational commitment

Meyer and Allen (2002), conceptualised a three-dimensional model for organisational commitment (Figure 2.10) in which the concept has divided the concept into three dimensions namely affective, normative and continuance commitment. This model has become the prominent model used in the study of organisational commitment according to multiple authors on this topic, including Jaros (2007), Bringham *et al.* (2013), Davis (2014) and Jaros and Culpepper (2014). These three dimensions will be used to test the commitment of employees for the purpose of this study and are discussed below.

Figure 2.10: Three-component Model of Organisational Commitment



(Source Meyer *et al.*, 2002)

Dimension 1: Affective commitment (AC)

Historical and recent studies including Porter (1979), Meyer and Allen (2002), Allen *et al.*, (2010) and Dixit (2012) and Anderson *et al.*, (2014) have described the term “employee commitment” as an affectionate feeling an individual has towards their employer. Anderson *et al.* (2014) described it as the degree to which an individual identifies with and has a need to be involved in a particular organisation. An individual is affectively committed to an organisation when he or she associates with the values and goals of the organisation, works hard for the organisation, and wants to continue working at the organisation (Anderson, 2014). Affectively committed employees generally display a sense of belonging and identification with the organisation which increases their involvement in organisational activities and are more willing to actively pursue the goals of the organisation (Morin *et al.*, 2011). It is the degree to which an employee can associate with his or her feeling of fondness towards the organisation.

Dixit (2012) found a positive correlation between affective commitment and positive work-related behaviours, such as high attendance rates, organisational citizen behaviour, performance beyond expectation, contribution to organisational effectiveness and job satisfaction (represented by a “+” in the model).

Dimension 2: Normative commitment (NC)

An individual experiencing normative commitment (NC) will remain with an organisation out of the sense of moral obligation, irrespective of how many increases or status improvements they receive (Anderson *et al.*, 2014). Employees experiencing normative commitment tend to remain with organisations, even during periods when no bonuses are paid and income reductions are necessary (Betanzos & Paz. 2011). Normative committed employees remain with an organisation, even when the organisation is performing poorly, because they feel it is the moral thing to do. This is different from affective commitment where employees remain with the organisation as long as it is mutually economically beneficial for both employee and organisation for the employee to remain with the organisation (Betanzos & Paz, 2011).

A feeling of obligation towards the organisation can develop when an organisation offers employees rewards in advance or when the employee feels that the organisation

has exerted effort to recruit or retain an employee and an employee may also experience NC due to long-term employment at an organisation (McMahon, 2007).

This obligation to remain with an organisation that employees experiencing NC poses spurs an employee on to even go beyond that what is expected of him or her to ensure that the organisation's goals are met (McMahon, 2007). Leon (2009) explains that NC motivates employees to do his or her job right the first time, to the highest possible standard due to a sense of responsibility to their contribution to the organisation.

Dimension 3: Continuance commitment (CC)

Continuance commitment (CC) is experienced when an employee remains with an organisation due to the costs associated with leaving or a lack of alternatives available (Anderson, 2014). Employees experiencing CC remains with the organisation because they believe that other organisations will not be able to match their salary and/or benefits currently being provided and also due to personal investment in the organisation in the form of non-transferable investments such as close work relationships with co-workers, career investments, the acquisitions of skills that are unique to the organisation, years of employment and involvement in the community where the employer is located (Chowwen, 2012).

Employees experiencing CC will only remain with the organisation because they 'have' to. This leads to them becoming disengaged and unproductive, as well as having a negative influence on workgroups (Represented by "0" and "-" in the model). With this in mind, the proposition that organisational productivity involves more than just a stable workforce is supported (McMahon, 2007).

2.4.3. Importance of organisational commitment

Nehmeh (2009) states that having a committed workforce can be seen as one of the most important factors in order to gain a competitive advantage. Research (Dixit, 2012; Nehmeh, 2009; McMahon, 2009 and Leon, 2009) has shown that committed employees exert more effort in their tasks, remain longer with the organisation and actively advances the organisation's goals than employees who are not.

OC reflects the extent to which employees relate to the organisation and is committed to its goals and serves as a predictor of employee performance, absenteeism and other behaviours (Dixit & Bathi, 2012).

Several studies (Baker, 2015; Coetzee, 2014; Faloye, 2014 & Morrison, 2008) have proved a positive relationship between organisational commitment and employee turnover. Employees are less likely to leave an organisation if they are committed. This means that organisations that are able to foster positive organisational commitment amongst its workforce are more likely to retain talent.

Organisations with low levels of commitment experience decreased levels of compliance as well as low levels of morale (Davies, 2015). Davies (2015) found that employees who are committed exerted more ethical behaviour than those who are not.

Dixit and Bhati (2012) found a significant positive correlation between organisational commitment and sustained productivity. As a consequence, management should focus on increasing employee commitment if they wish to take the organisation towards a competitive edge.

2.6. Relationship between organisational commitment and organisational climate

Section 2.2 of this chapter discussed the concept of organisational climate and section 2.3 discussed organisational commitment. This section focuses on previous studies that have attempted to prove the correlation between OCL and OC. An integrated model of the link between OCL and OC has been presented in figure 2.10 earlier in this chapter.

Below is a list of studies that were conducted in an attempt to find a relationship between organisational climate and organisational commitment:

- Brigit *et al.* (2010), found that group organisational climate is a significant predictor of organisational commitment. They argued that management should not only pay attention to good management styles but should also recognise the impact that group dynamics have on employee commitment.

- Davies (2010) also found a significant positive relationship between organisational climate and affective and normative commitment in the hospitality sector. Davies (2010) identified undesired employee behaviour such as absenteeism and high employee turnover in organisations with both low organisational climate and commitment. Therefore, management should focus on addressing negative perceptions of the organisation by providing employees with the correct knowledge of the organisation and engaging with them on a regular basis to assist in changing climate. Organisations that are managed by best practices and abide by legislation tend to have employees that abide by rules and regulations themselves and are also more committed than employees who are employed at organisations that tend to be less ethical (Davies, 2010).
- Similar results were found in the manufacturing and IT sector (Mohan & Sharma, 2015). Mohan and Sharma (2015) found a positive correlation between the two concepts. It was found that employees are more committed in an organisation which they feel they have faith in, and can trust their managers as well when organisations foster a climate of “fail without fear”. Similar findings were made by Puri and Saxena (2014) in the public sector.
- Sarbessa (2014) found a positive relationship between affective and normative commitment and organisational climate, but found a negative relationship between climate and continuance commitment. The results of their study shows that a positive climate can enhance a positive perception of employees about the organisation and increase commitment and vice versa. Serbessa (2014) states that climate is a predictor of commitment in that if an organisation has a positive climate, then it can be assumed that employees are committed.
- Another study found a positive and significant correlation between organisational climate and organisational commitment. This time in the healthcare environment (Bahrami *et al.*, 2016). They recommended that managers attempt to understand the organisational climate and its factors in order to increase commitment of employees. Bahrami *et al.* (2016) also mentioned the importance of management to start with themselves in that they have to understand organisational goals and commit to meet these standards in order to set the standard on how employees should behave.

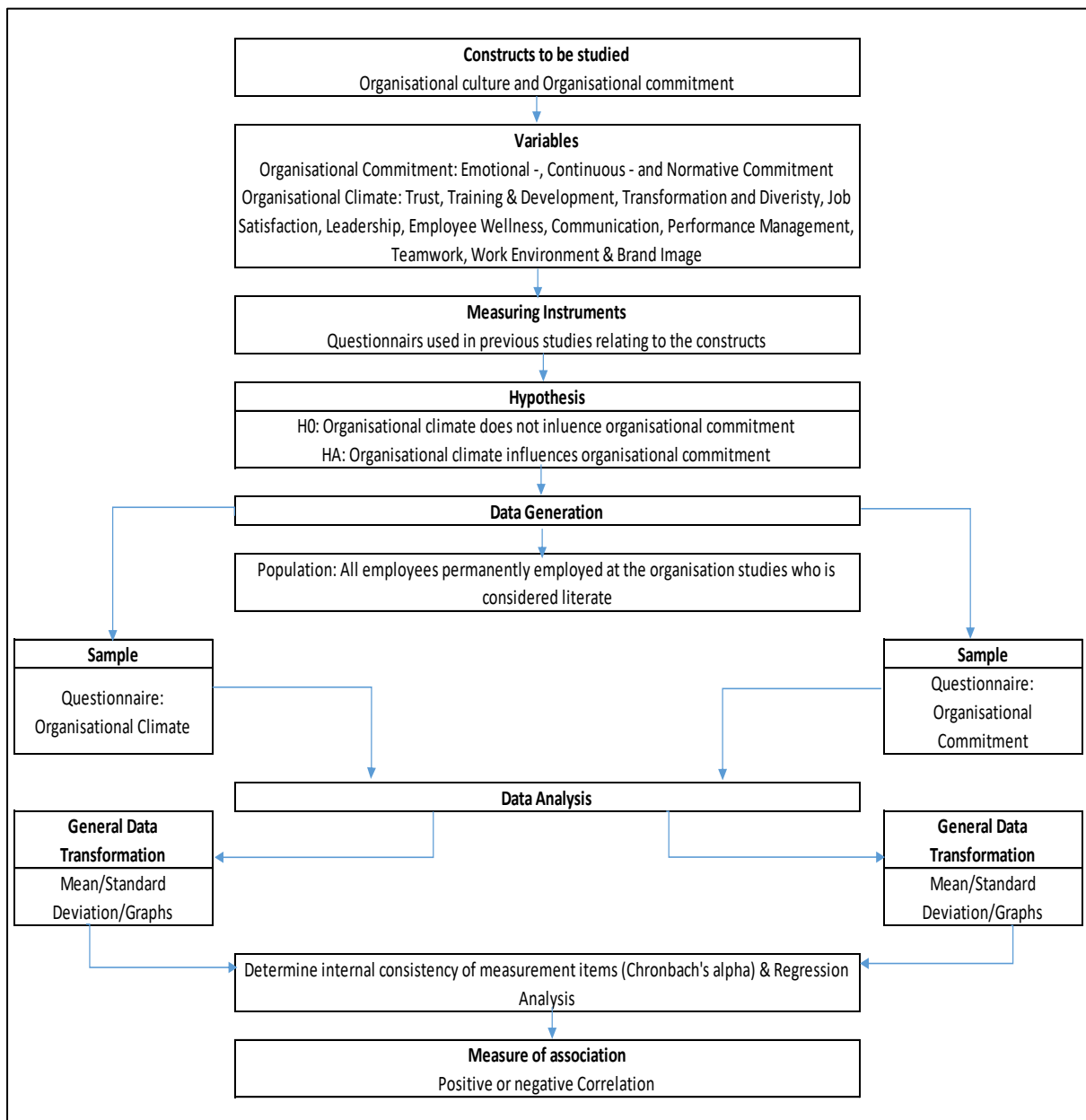
- A study conducted in the hospital nursing sector in Taiwan revealed a negative correlation between organisational climate and commitment and intention to leave (Cheng, 2010). The study found that, although organisational climate is perceived to be good, organisational commitment and intention to leave are low. This is contrary to the previous discussions of this chapter which stated that studies have found a strong positive correlation between positive OCL, OC and low intentions to leave. The authors explain that a possible reason for this could be the culture element of the Taiwanese which emphasises collectivism, loyalty and collective goals. This means that employees will stay with the organisation even if they do not feel committed (Cheng, 2010).
- Another study that found conflicting results was performed in the Pakistani Knitwear industry. Here, both negative and positive correlations were found between organisational climate and commitment (Iqdal, 2008). Iqdal (2008) found there is a positive correlation between climate and commitment when it comes to certain dimensions of climate. These dimensions are challenge and involvement and trust and openness. But role conflict (as a dimension of climate) was found to have a negative effect on commitment in the sense that role conflict would result in low stress, which in turn would result in an increase in commitment (Iqdal, 2008). In addition to this, it was found that there is no relationship between the dimension of risk taking and that of commitment. The reason offered has to do with organisational structures in Pakistan, which are highly hierarchic with a centralised power at the top which dissuades employees to take on tasks when the perceived costs are too high for expected benefits (Iqdal, 2008).
- The relationship between organisational climate and organisational commitment has also been found in the South African fast-moving consumer goods industry (Eustace & Martins, 2014).

2.7. Summary

This chapter has introduced and defined the concepts of organisational climate and organisational commitment, outlining their dimensions and discussing both their research and business relevance. The following chapter discusses the results of the

evaluation of organisational commitment and organisational climate in the context of an organisation providing services to the mining sector in South Africa. Through an exploration of the statistical results of the study the research will attempt to prove a correlation between the two constructs. Figure 2.11 below illustrates the developed framework which will be empirically tested in the next chapter.

Figure 2.11: Empirical test framework



CHAPTER 3

EMPIRICAL INVESTIGATION

3.1. Introduction

This chapter details the empirical research performed in order to answer the research questions of Chapter 1. The chapter begins with describing the procedure and scope of the research, then goes on to discuss the sampling criteria and data collection method, after which the results of the statistical analysis is discussed, the hypothesis analysed and concludes with a summary.

The aim of the research was to analyse organisational climate and its impact on employee commitment in a mining services supplier. In this chapter the empirical study conducted within the organisation is detailed and the results of the study presented, discussed and interpreted from the evidence collected. Statistical analysis results are described and inferences made culminating in arguments for the acceptance or rejection of H_0 . Additionally, the research also analysed the level of organisational climate (OCL) and organisational commitment (OC). The results of this research is presented in the remainder of this chapter.

3.2. Research methodology

3.2.1. Research approach

A quantitative research approach was followed making use of a cross-sectional survey. Quantitative research makes use of statistical, mathematical and numerical analysis of data collected through polls, surveys and questionnaires to objectively generalise the results across groups of people or to explain a particular phenomenon (Muijs, 2010). For this study, a cross-sectional survey was used. A cross-sectional survey is a quantitative research approach that measures a population at a particular point in time, providing a “snapshot” of the current state, in this case, of organisational climate and commitment (Saunders *et al.*, 2016). The survey strategy is popular in business and management research for being particularly useful for the deductive approach to theory building (Saunders *et al.*, 2003). Surveys allow economic collection of large amounts of research information from a sizeable population, providing information that is easily compared and standardized; and is often used to assess

thoughts, opinions, and feelings (Shaughnessy *et al.*, 2011). A survey was selected to provide an accurate portrayal or account of the characteristics of the opinions and beliefs of the sample. This design was chosen to meet the objectives of the study, to namely assess the influence organisational climate has on organisational commitment in an organisation providing services to the mining industry of South Africa. Self-administered questionnaires were distributed to the subjects.

3.2.2. Target population

The target population is the entire set of cases or group members, individuals or objects that form the actual focus of enquiry, from which a sample may be drawn and to which research results can ideally be generalised (Saunders *et al.*, 2016). For the purpose of this study, the target population comprised all employees of the mining services provider's South African operations. The study population however, being a subset of the target population accessible for the purposes of conducting the research and consisting of the group of people who meet the operational definition of the target population as indicated by the research inclusion criteria, was about 150 full-time employees working at the mining services provider's South African Head Office. The inclusion criteria for the study population for the research employees at the South African Head Office:

- Possessing a grade 12 level of education or higher
- Are eighteen years and older
- Any gender or race
- Are permanently employed at South African operation of the mining services provider.

3.2.3. Sampling

Convenience sampling was used for the study. Convenience sampling is a form of a non-probability purposive sampling technique performed by making use of survey participants that are most easily accessible or available to the researcher (Saunders *et al.*, 2016). While convenience sampling is often not given much credibility, Saunders *et al.* (2012) indicate that convenience samples often meet purposive sample selection

criteria relevant to the research objectives, making the conveniently accessed sample in fact “typical” of the target population. Time constraint and the geographical spread were indicated in Chapter 1 as reasons for conducting a convenience sample. Selection of participants was thus based on both ease of access to research participants within the research period as well as their relevance for the research. A sample size of 127 was used for the study.

3.2.4. Data Collection and analysis

3.2.4.1. The survey instruments

One survey instrument divided into three sections was used for the purpose of measuring the independent variable (organisational climate) and the dependent variable (organisational commitment) in the chosen organisation (refer Appendix D).

- The first section of the questionnaire gathered biographical data;
- Section two gathered data regarding organisational climate; and
- the third section gathered organisational commitment data.

Organisational climate (Section 2) was evaluated based on Dr. Nico Martins’ Organisational Climate Questionnaire. Permission was requested by means of email from orgdia@iafrica.com, but no response was received. A copy of this email is attached in Appendix B. The Organisational Climate Questionnaire makes use of seventy questions with eleven subsections for each dimension of organisational climate. The dimensions are trust, training and development, transformation and diversity, job satisfaction, leadership, employee wellness, communication, performance management, teamwork, work environment and brand image. Each dimension was assessed using a five-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

To evaluate commitment levels, the TCM Employee Commitment Survey (2004) based on Allen and Meyer’s Three-Component Model of commitment was used to measure the three dimensions of organisational commitment for each survey participant (Section 3). Permission to use this questionnaire is free for download if used for academic purposes from www.employeecommitment.com (Meyer & Allen, 2004). The TCM Employee Commitment Survey is a three-dimensional scale

measuring three forms of employee commitment to the organisation, namely desire-based (affective), obligation-based (normative) and cost-based (continuance) commitments using three validated scales, the Affective Commitment Scale (ACS), the Normative Commitment Scale (NCS) and the Continuance Commitment Scale (CCS) (Meyer & Allen, 2004). The revised version of the TCM Employee commitment scale comprises 18 items (4 reverse items and 14 forward items) making the three sub-scales, the ACS; CCS and NCS. Each sub-scale comprises six items on a seven-point Likert response scale and for survey administration purposes, the eighteen items were mixed as suggested (Allen & Meyer, 2004). The original questionnaire made use of a seven-point Likert scale ranging from “Strongly Agree” to “Strongly Disagree”, but this was changed to a five-point Likert scale with the same range when the questionnaires were combined for the sake of congruence between the sections of the survey instrument.

A single open-ended question was included at the end of the questionnaire (question 87) to obtain a general view of the respondents with regards to the company’s assets and liabilities. This was assessed for emerging themes that can be used to categorise respondent comments. The categories with the most responses are the theme that were most frequently cited (Mayring, 2000). While no detailed analysis of the open-ended question was conducted, the responses provided a basis for interpreting some findings on the key constructs for this research.

3.2.4.2. Pilot study

A pilot study was conducted before the questionnaires were distributed to the sample. The pilot questionnaire was distributed to nine individuals based on geographical convenience. The respondents were asked to complete the questionnaire and comment on any questions that might be vague and whether the questions are suitable or not. In addition to this, the respondents were asked to comment on the layout and user-friendliness of the questionnaire. The questionnaire was adapted accordingly

3.2.4.3. Data analysis

The questionnaires were delivered in hard copy to a total of 127 employees of the organisation meeting the sample criteria and collected physically once completed. Participants were assured of the confidentiality of their responses. The data collected were captured and analysed by the North-West University's Statistical Consultation Services at the Potchefstroom Campus using SAS (SAS Institute Inc., 2005). Additional statistical analyses were also conducted using SPSS (SPSS Inc., 2008) where necessary.

3.3. Results

3.3.1. Demographic profile of respondents

A total of 92 questionnaires representing a response rate of 72.44% were received and analysed. The following demographic descriptions, as summarised in Table 3.1, show the distribution of respondents according to age, gender, language, level of education, level in organisation, years of service, legal entity and department based on their responses to the questionnaire (Appendix D).

Table 3.1 follows on next page

Table 3.1: Demographic profile of the respondents

	Class	Key	Frequency	Percent					
Age	18-29	1	39	42.4					
	30-39	2	28	30.4					
	40-50	3	17	18.5					
	51+	4	8	8.7					
Gender	M	1	51	55.4					
	F	2	41	44.6					
Language	Afrikaans	1	77	83.7					
	English	2	7	7.6					
	IsiZulu	3	1	1.1					
	SeTswana	4	4	4.3					
	Other	5	3	3.3					
Years of service	0-1	1	18	19.6					
	2-5	2	48	52.2					
	6-10	3	14	15.2					
	10+	4	12	13.0					
Education level	Grade 12	1	28	30.4					
	Diploma	2	21	22.8					
	Degree	3	15	16.3					
	Post Degree	4	27	29.3					
Organisational level	Top Management	1	1	1.1					
	Middle Management	2	38	41.3					
	Lower Management	3	14	15.2					
	Support staff	1	29	31.5					
	Helper/Assistant	5	2	2.2					
	Other	6	4	4.3					
Legal entity	Subsidiary A	1	47	51.1					
	Subsidiary B	2	14	15.2					
	Subsidiary C	3	7	7.6					
	Subsidiary D	4	22	23.9					
	Other	5	2	2.2					
Department	Finance	1	34	37.0					
	Engineering	2	17	18.5					
	Procurement	3	4	4.3					
	Logistics	4	10	10.9					
	Production	5	4	4.3					
	Admin-General	6	18	19.6					
Area	Fochville	1	87	94.6					
	Site	2	4	4.3					
	Age	Gender	Language	Years of service	Education level	Organisational level	Legal entity	Department	Area
N	92		92	92	91	88	92	87	91
Median	2	1	1	2	2	3	1	2	1
Mode	1	1	1	2	1	2	1	1	1
Skewness	.704	.222	2.845	.618	.099	1.191	.428	.776	4.524
Std. Error of Skewness	.251	.251	.251	.251	.253	.257	.251	.258	.253

- **Demographics: Age and Gender**

Over seventy percent of the respondents were under the age of 39 years, with the highest response rate being recorded in the 18-29 years age band. Table 3.2 shows the profile of respondents by age and gender. A total of 55% of the respondents were male, the remaining 45% being female. A gender representation of a ratio of nearly 50:50 is good considering the industry average of 10.5% (Mavuso, 2015), but this is largely due to the convenience sample concentrating on mainly administrative functions of the organisation. If a sample of the entire organisation had been taken the ratio would represent a gender profile closer to the industry average.

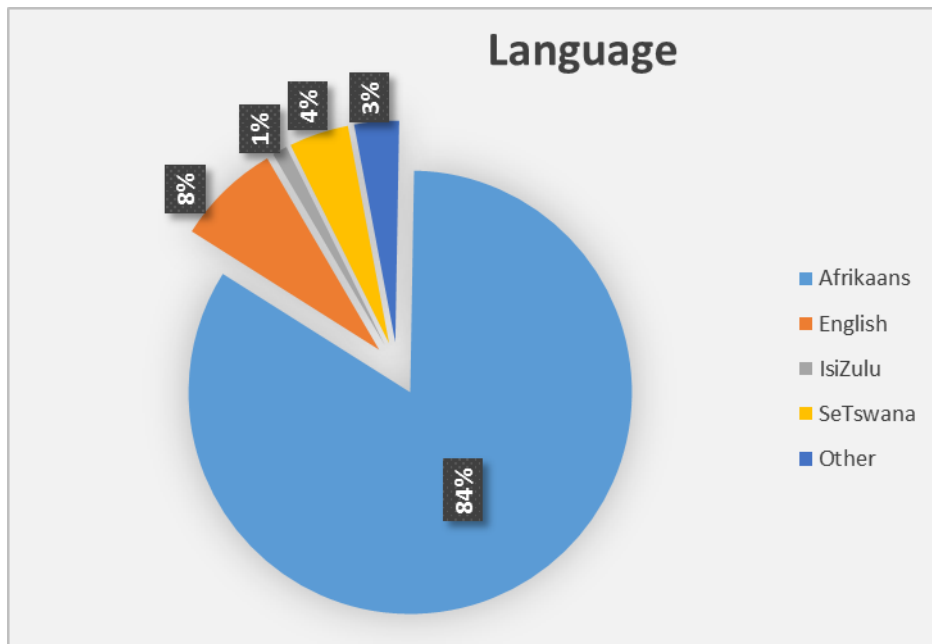
Table 3.2: Age * Gender Cross tabulation

			Gender		Total
			M	F	
Age	18-29	Count	28	11	39
		% of Total	30.4%	12.0%	42.4%
	30-39	Count	15	13	28
		% of Total	16.3%	14.1%	30.4%
	40-50	Count	3	14	17
		% of Total	3.3%	15.2%	18.5%
	51+	Count	5	3	8
		% of Total	5.4%	3.3%	8.7%
Total		Count	51	41	92
		% of Total	55.4%	44.6%	100.0%

- **Demographics: Language**

The majority of respondents indicated Afrikaans to be their first language (84%), while only 8% were English speaking (Figure 3.1). The questionnaire was administered in English to avoid the need to translate from the original language in which the instruments were developed. None of the respondents indicated experiencing any difficulties in reading and understanding the questionnaire.

Figure 3.1: Language distribution



- **Demographics: Level of education and Level in organisation**

While efforts were made to gather data from as representative a sample as possible, Table 3.3 indicates that management (top, middle and lower level) accounted for 61% of the responses, middle management making the majority of respondents at 43.7%, while lower level employees accounted for only 39% of the respondents. This distribution corresponds with and could be explained by the education levels within the groups, with 70% of respondents possessing education beyond grade 12, of these, 75% being at management level compared with only 25% being operational level employees. The majority of respondents having a qualification of grade 12 and above is in line with the company being an international concern with skills level requirements above the average but this requirement (minimum grade 12) for the research could have eliminated from the sampling frame a considerable portion of operational level employees.

Table 3.3: Educational Level * Organisational level Cross tabulation

		Organisational level						Total	
		Top Management	Middle Management	Lower Management	Support staff	Helper/ Assistant	Other		
Education level	Grade 12	Count	0	5	2	14	1	4	26
		% of Total	.0%	5.7%	2.3%	16.1%	1.1%	4.6%	29.9%
	Diploma	Count	0	6	3	11	1	0	21
		% of Total	.0%	6.9%	3.4%	12.6%	1.1%	.0%	24.1%
	Degree	Count	0	4	7	2	0	0	13
		% of Total	.0%	4.6%	8.0%	2.3%	.0%	.0%	14.9%
	Post Degree	Count	1	23	2	1	0	0	27
		% of Total	1.1%	26.4%	2.3%	1.1%	.0%	.0%	31.0%
	Total	Count	1	38	14	28	2	4	87
		% of Total	1.1%	43.7%	16.1%	32.2%	2.3%	4.6%	100.0%

- Demographics: Years of service, Level of education and Organisational Level**

Some 72% of the employees have been in the organisation for less than five years, only 14% having over ten years of service. The longest serving employees (10+ years) are middle and lower level managers (Table 3.4), as well as operational employees possessing grade 12 as the highest level of education. Of the middle managers who make the majority of the respondents (44%), only 18% have been in the organisation over 6 years. The highest number of employees with tertiary education beyond the first degree is also highest in this group.

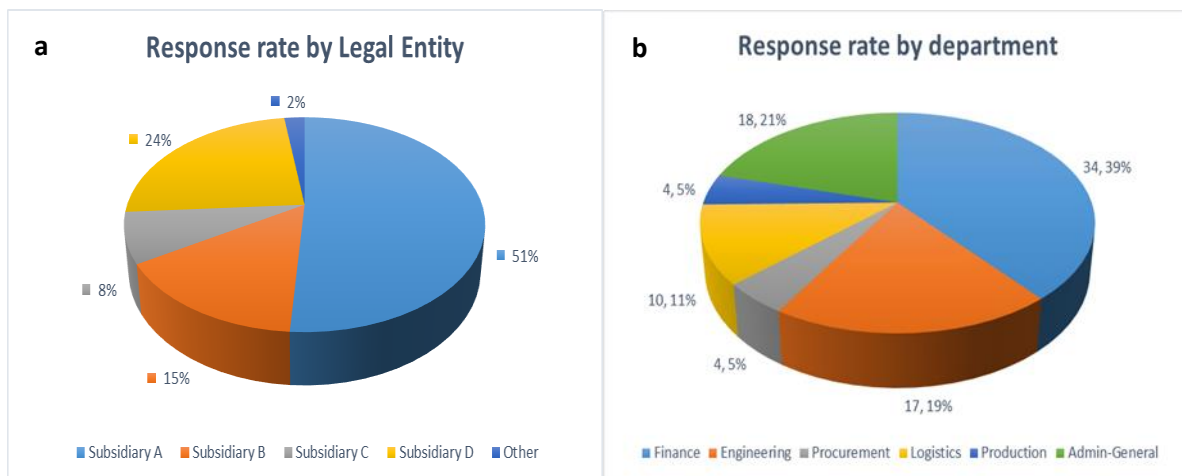
Table 3.4: Years of service*Organisational Level*Organisational Level Cross tabulation

Organisational_level				education level				Total
				Grade 12	Diploma	Degree	Post Degree	
Top Management	years_of_service	6-10	Count				1	1
			% within years_of_service				100.0%	100.0%
			% within education_level				100.0%	100.0%
	Total	Count				1	1	
			% within years_of_service				100.0%	100.0%
			% within education_level				100.0%	100.0%
Middle Management	years_of_service	0-1	Count	1	1	0	3	5
			% within years_of_service	20.0%	20.0%	.0%	60.0%	100.0%
			% within education_level	20.0%	16.7%	.0%	13.0%	13.2%
		2-5	Count	0	3	3	20	26
			% within years_of_service	.0%	11.5%	11.5%	76.9%	100.0%
			% within education_level	.0%	50.0%	75.0%	87.0%	68.4%
		6-10	Count	1	0	1	0	2
			% within years_of_service	50.0%	.0%	50.0%	.0%	100.0%
			% within education_level	20.0%	.0%	25.0%	.0%	5.3%
		10+	Count	3	2	0	0	5
			% within years_of_service	60.0%	40.0%	.0%	.0%	100.0%
			% within education_level	60.0%	33.3%	.0%	.0%	13.2%
	Total	Count	5	6	4	23	38	
	% within years_of_service	13.2%	15.8%	10.5%	60.5%	100.0%		
	% within education_level	100.0%	100.0%	100.0%	100.0%	100.0%		
Lower Management	years_of_service	0-1	Count	0	0	2	1	3
			% within years_of_service	.0%	.0%	66.7%	33.3%	100.0%
			% within education_level	.0%	.0%	28.6%	50.0%	21.4%
		2-5	Count	0	2	3	1	6
			% within years_of_service	.0%	33.3%	50.0%	16.7%	100.0%
			% within education_level	.0%	66.7%	42.9%	50.0%	42.9%
		6-10	Count	1	0	2	0	3
			% within years_of_service	33.3%	.0%	66.7%	.0%	100.0%
			% within education_level	50.0%	.0%	28.6%	.0%	21.4%
		10+	Count	1	1	0	0	2
			% within years_of_service	50.0%	50.0%	.0%	.0%	100.0%
			% within education_level	50.0%	33.3%	.0%	.0%	14.3%
	Total	Count	2	3	7	2	14	
	% within years_of_service	14.3%	21.4%	50.0%	14.3%	100.0%		
	% within education_level	100.0%	100.0%	100.0%	100.0%	100.0%		
Support staff	years_of_service	0-1	Count	2	3	1	0	6
			% within years_of_service	33.3%	50.0%	16.7%	.0%	100.0%
			% within education_level	14.3%	27.3%	50.0%	.0%	21.4%
		2-5	Count	6	4	1	1	12
			% within years_of_service	50.0%	33.3%	8.3%	8.3%	100.0%
			% within education_level	42.9%	36.4%	50.0%	100.0%	42.9%
		6-10	Count	4	2	0	0	6
			% within years_of_service	66.7%	33.3%	.0%	.0%	100.0%
			% within education_level	28.6%	18.2%	.0%	.0%	21.4%
		10+	Count	2	2	0	0	4
			% within years_of_service	50.0%	50.0%	.0%	.0%	100.0%
			% within education_level	14.3%	18.2%	.0%	.0%	14.3%
	Total	Count	14	11	2	1	28	
	% within years_of_service	50.0%	39.3%	7.1%	3.6%	100.0%		
	% within education_level	100.0%	100.0%	100.0%	100.0%	100.0%		
Helper/Assistant	years_of_service	2-5	Count	1	1			2
			% within years_of_service	50.0%	50.0%			100.0%
			% within education_level	100.0%	100.0%			100.0%
	Total	Count	1	1			2	
	% within years_of_service	50.0%	50.0%			100.0%		
	% within education_level	100.0%	100.0%			100.0%		
Other	years_of_service	0-1	Count	1				1
			% within years_of_service	100.0%				100.0%
			% within education_level	25.0%				25.0%
		2-5	Count	2				2
			% within years_of_service	100.0%				100.0%
			% within education_level	50.0%				50.0%
	6-10	Count	1				1	
		% within years_of_service	100.0%				100.0%	
% within education_level		25.0%				25.0%		
Total	Count	4				4		
	% within years_of_service	100.0%				100.0%		
	% within education_level	100.0%				100.0%		

- **Demographics: Department and legal entity**

Distribution of respondents by department and legal entity is shown in Figure.3.2. Some 51% of the responses were from Subsidiary A, while in terms of departments, the finance department formed the bulk of responses received (34.39%).

Figure 3.2: Response rates by legal entity and department



Chapter two provides a background of the organisation which explains the departments and legal entities. Figure 3.2 (a) indicates that 75% of respondents are employed by two subsidiaries of the organisation. Some 51% of the respondents are employed in Subsidiary A, which is mainly concerned with shared services administration activities, followed by 24% from Subsidiary D, comprising mainly employees from an engineering background. This is confirmed by Figure 3.2 (b), indicating that 52.6% of respondents are employed in the finance and administration departments and 17.19% from engineering.

The analysis of the demographics and summary of descriptive statistics above provides the background to the statistical analyses that were conducted to test the hypotheses of this research. These analyses are discussed in the following section.

3.3.2. Determining current organisational climate and commitment level

The research aimed at assessing the influence of organisational climate on organisational commitment for a company providing services to the mining industry. To make such an assessment, the research sought to evaluate the current organisational climate as perceived by the employees as well as determine the current level of organisational commitment. Through the survey, data necessary to make such an evaluation were collected and analysed.

3.3.2.1. Descriptive statistics: Organisational Climate questionnaire

Organisational Climate was measured using the Organisational Climate Questionnaire as part of the survey instrument (Section 2 of questionnaire of Appendix D). Descriptive statistics computed for the various dimensions assessed by the section of the questionnaire are presented in Table 3.5.

Table 3.5: Descriptive statistics for the organisational climate questionnaire.

Dimension	N	Mean		Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic
Trust	92	3.46	.091	.876	-.243	-.721
Training development	92	2.93	.074	.709	-.309	-.590
Transformation diversity	92	3.39	.073	.697	-.341	-.275
Job satisfaction	92	3.47	.0816	.782	-.076	-.784
Leadership	92	3.73	.090	.864	-.567	-.395
Employee wellness	92	2.99	.084	.802	-.392	-.183
Communication	92	3.30	.088	.841	-.709	.189
Performance management	92	2.85	.075	.720	-.013	-.134
Teamwork	92	3.45	.072	.695	-.879	.110
Work environment	92	3.85	.075	.718	-.723	.824
Organisational image	92	3.85	.067	.646	-.624	.506
Overall Average Climate	92	3.39	.064	.61	-.344	-.456
				Standard error	0.251	0.498
				Acceptability range	+/-0.503	+/-0.996

Measures of Kurtosis and skewness were computed for the dimensions of organisational climate based on a sample size of 92. All the dimensions were negatively skewed (clustered toward higher values) with five of the eleven significantly skewed when using the acceptability range of two standard errors of skewness (ses)

for determining significant skewness (Price, 2000; Brown, 1997). Kurtosis measures were negative (platykurtic distribution) however remaining within the acceptable range of two standard errors of kurtosis. Kurtosis, a measure of a distribution's peakedness or flatness compared to a normal distribution was computed and likewise, two standard errors of kurtoses used to determine significant deviation from a mesokurtic (normally peaked) distribution. Positive kurtosis values would indicate a peaked distribution (clustered in the centre) with long thin tails while negative kurtosis values indicate a flat or even concave distribution (Pallant, 2013). Seven of the eleven dimensions of organisational climate had negative kurtosis values.

Evaluating the means (Table 3.5) to describe the organisational climate construct in terms of its dimensions indicates that all dimensions, except employee-wellness, training and development as well as performance management were above a mean score cut off point of 3.2 (Castro, 2008). In assessing organisational climate, Castro (2008:139) used a mean score of 3.2 as the cutoff point with scores above 3.2 indicating a positive climate while those lower than 3.2 suggest a negative organisational climate. The perception of organisational climate using the overall average climate score for the study is positive (mean score 3.39). Employee perception of the organisation as depicted by each of the climate dimensions is generally positive, with a particularly positive perception of work environment, organisational image and leadership.

Considering the distribution of respondents amongst management and operational level employees however (44% of respondents being top and middle managers compared to 66% being lower level managers and operational employees), the perception of leadership dimension may be exaggerated for the sample. Further analysis of the mean leadership scores based on organisational level confirms the positive skewing of perception of leadership by the large group of management level respondents (scores range from 3.50 in lower level assistants to a high 3.95 in middle managers). To an extent, managers were providing a perception of their own performance. Taking the above into consideration, it is noted that a number of respondents indicated difficulties in deciding their level in the organisation. This suggests an unstructured environment in which clear role definition may be absent. The possible absence of a hierarchy, which could be beneficial in the case of group work, could be confusing where employees prefer and expect a certain level of

direction and intra-group coordination that reduces conflict and facilitates communication as well as effective participation (Goh & Low, 2014; Anderson & Brown, 2010; Gillepsie & Mann, 2004). An unstructured environment also impacts the chain of command in an organisation, which could lead to reduced efficiency and productivity (Anderson & Zbirenko, 2014).

The overall positive view of leadership is a pivotal aspect however when leveraging organisational strengths for the development of high levels of employee commitment. Building on the positive management perception, job satisfaction and trust (which were also positive with mean scores of 3.47 and 3.46 respectively), management has the necessary basis for nurturing commitment amongst employees (Goh & Low, 2014; Folkman, 2010). The leadership perception may also be a factor in the positive perception of work environment when the associated support and guidance that come with trusted leadership are considered (Wallace, de Chernatony & Buil, 2013; Eisenberger, Fasolo & Davis-LaMastro, 1990).

Similar to the results obtained by Castro (2008), the perception of organisational image is high (3.85) and is concomitant with the nature of the operation being one of the largest international concerns offering a unique service in a niche market. These are factors that enable the employees to identify with and hold in esteem the brand image. These positive factors seem to be in stark contrast with the particularly low perceptions of performance management, employee wellness and training and development. The results suggest employees feel their opportunities for personal training and development are limited within the organisation and there is an under-emphasis on employee personal life and wellness.

3.3.2.2. Descriptive statistics: Organisational Commitment Questionnaire

Measures of skewness and kurtoses were computed for the dimensions of the organisational commitment section of the questionnaire as well. Table 3.6 summarises the descriptive statistics for section three of the questionnaire which deals with organisational commitment. Values of skewness and kurtoses for all dimensions were acceptable except for normative commitment that fell slightly out of the acceptability range for negative skewness. Like most deviations from a normal distribution, the sample size could likely be cited as a contributing factor.

Table 3.6: Descriptive statistics for organisational commitment questionnaire

Dimension	N	Mean		Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic
Affectionate commitment	92	3.2347	.07556	.72476	-.454	.063
Continuance commitment	92	3.0163	.06137	.58865	.362	.077
Normative commitment	92	3.1133	.08035	.77070	-.634	.049
Commitment	92	9.3324	.16233	1.55704	-.229	-.490
				Standard error	0.251	0.498
				Acceptability range	+/-0.503	+/-0.996

As already noted by Brown (2003), in describing the application of their Organizational Commitment Questionnaire scales, Meyer and Allen (2004:53) do not provide guidance on expected, desired, average, or even ideal means for affective, continuance, and normative commitments. Their focus is on the patterns of relationships between the components of organisational commitment and outcomes that are being measured. The desired pattern is one in which the highest scores are for affective commitment, followed by normative commitment, then continuance commitment. Mean scores for the study reflect that affective commitment scores were only marginally higher than normative commitment and continuance commitment score (Figure 3.3), however, the difference between affective and continuance commitments is statistically significant at the 5% significance level ($t=2.243, p=0.026$). There were no statistical significant difference at the 5% significance level between normative commitment and continuance commitment ($t=0.969; p=0.339$).

Figure 3.3: Profile of mean commitment scores



3.3.3. Statistical analysis and hypothesis testing

Descriptive statistics discussed above were used to analyse the raw data obtained from the 92 questionnaires and following data cleaning and exclusion of cases with missing values various statistical analyses were conducted. Factor analysis and Cronbach’s coefficient alpha were used in determining the discriminant validity and reliability of the measuring instrument. Factor analysis, a common technique for finding patterns in data of high dimension (Smith, 2006) was carried out to investigate the underlying structure of the measuring instruments. Correlations amongst variables were assessed using both correlation and regression analyses. Interpretations of the practical significance of associations were done using the Pearson correlation coefficients as effect sizes. No inferential statistics were interpreted, although p-values were reported as if random sampling was assumed. Analysis of Variance (ANOVA) was conducted to determine the influence of various demographic variables (particularly age, years of service, department) with nominal scales on the dependent variables (affective, continuance and normative commitments). Since the sampling procedure followed was not random, interpretation of differences between group-

means mainly followed Cohen's "d" for evaluating effect sizes (Cohen, 1988) in addition to the partial Eta squared evaluation.

3.3.4. Reliability of measuring instruments

Reliability concerns reproducibility, if a research can be replicated and still give the same results (Saunders, 2016). Reliability of a test can be expressed in terms of stability which measures the consistency of scores obtained by the same persons when re-examined using the same test on different occasions (test-retest); equivalence which uses different sets of equivalent items (alternate form); and consistency (Yu, 2001). Consistency check, which is commonly expressed in the form of Cronbach's Coefficient Alpha (Cronbach, 1951), is the most popular test of reliability used in research (Saunders, 2016). Reliability estimates contained in the manuals of the instruments as measured by the developer may be useful for comparative purposes, but it is imperative to report reliability estimates obtained for the sample used in the study under consideration since reliability is a function of the sample data (Field, 2013; Eason, 1991; Pedhazur & Schmelkin, 1991). Reliability of the instrument in this research was assessed through the determination of Cronbach's alpha. The values of alpha were then compared with the original reliabilities reported for the scales although Gedermann, Guhn and Zumbo (2012) recommend using ordinal reliability coefficients (like the Ordinal Alpha) for Likert-type and mixed response data as a source of information on a scale's reliability and validity (Gedermann *et al.*, 2012:7).

3.3.4.1. Cronbach's Alpha coefficients

Internal consistency describes the extent to which all the items in a study measure the same concept. Cronbach's Alpha is the most commonly reported measure of internal consistency and index of test reliability. Alpha as an index of reliability is affected by the number of test items (test length), item interrelatedness (internal correlations) and dimensionality (Tavakol & Dennick, 2011). The acceptable range for the coefficients varies from 0.70 to 0.95 and a rule of thumb (or common practice) is that an Alpha coefficient above 0.70 is acceptable (Saunders, 2016; Yu, 2001; Nunnally, 1978),

while a coefficient above 0.95 may (but not necessarily) suggest that the construct is uni-dimensional and need not be analysed for latent variables (Yu, 2001). High values of alpha may also reflect redundancies in the measurement instrument rather than internal consistency, particularly when too many items are packed into a single scale (scale length effects on alpha) (Panayides, 2013).

Cronbach's alpha coefficient was calculated for each of the constructs and the results are summarised in Table 3.7. Items used to test the constructs ranged from two (Work environment) to eleven (Leadership). Two constructs yielded a Cronbach's alpha coefficient less than 0.7, that is, work environment in the organisational climate scale and Continuance commitment in the organisational commitment scale. Alpha values for items in the organisational climate scale were largely above 0.70 and thus acceptable. The overall organisational climate scale was also reliable with an alpha of 0.95. The range for coefficient alpha values for the eleven dimensions of organisational climate were from a low 0.53 to a high 0.94 for leadership. Castro (2008) has recorded similar reliabilities (total scale alpha of 0.97 including a low work environment alpha of 0.59). Overall, the scales were reliable.

For the commitment scales, previous researchers have reported Cronbach's alpha ranging from 0.73 to 0.87 (Bagram, 2003; Irving, *et al.*, 1997; Meyer *et al.*, 1993). Meyer and Allen (1993), in particular, indicate that the reliability figures for the three commitment scales are above the acceptable levels (coefficient alphas of 0.87 for ACS, 0.75 for CCS and 0.79 for NCS) in their assessments. For this study, the coefficient alphas were 0.53; 0.81 and 0.83 for Continuance, affectionate and normative commitments respectively, falling within Nunnally's (1978) acceptable range except for continuance commitment.

Table 3.7: Cronbach Alpha Coefficients

Construct	Items	SD Min	SD Max	Alpha Raw; n=92	Alpha Standardised; n=92
Organisational Climate				0.945	0.945
Trust	5	0.885	1.144	0.873	0.876
Training and Development	7	0.895	1.387	0.714	0.737
Transformation and Diversity	9	0.809	1.245	0.859	0.857
Job satisfaction	5	0.859	1.262	0.819	0.820
Leadership	11	0.877	1.250	0.943	0.942
Employee Wellness	5	0.983	1.211	0.798	0.804
Communication	7	0.936	1.290	0.876	0.879
Performance Management	6	1.008	1.240	0.737	0.744
Teamwork	7	0.854	1.168	0.825	0.822
Work environment	2	0.851	0.888	0.533	0.533
Organisation Image	4	0.688	0.939	0.819	0.822
Organisational Commitment					
Affectionate Commitment	6	0.934	1.019	0.811	0.810
Continuance Commitment	6	0.998	1.131	0.542	0.534
Normative Commitment	6	0.812	1.118	0.851	0.852

The continuance commitment scale has been shown to occasionally record lower alpha values than normative and affectionate commitments or even than conventionally acceptable, yet still be considered acceptable (Brown, 2003). The value is particularly low for the sample (alpha =0.54) and this corresponds to the very low inter-item correlations for item 73 (“If I had not already put so much of myself into this organisation, I might consider working elsewhere”) (Appendix D) and item 79 (“Right now, staying with my organisation is a matter of necessity as much as desire”). If both are dropped, alpha would only improve to 0.62 and be barely acceptable for social sciences according to Nunnally and Bernstein, (1994). For this study thus none of the items were excluded in the analysis.

Total commitment was computed as a composite score (by summing affective, normative and negated continuance scores). The overall alpha for the composite commitment score was also a low 0.59 (raw and 0.55 standardised). The computation of a composite commitment score is not common, and according to Dolma *et al.* (2012), also not encouraged given the original model on which the instrument is built

specifies “components” and not “factors” of commitment. In this view, “organisational commitment” as conceptualised by Allen and Meyer’s (1993) model is not a construct but a group name for the three components making the concept of a composite score both flawed and meaningless since individuals will necessarily exhibit varying levels of each of the components rather than any one (Dolma *et al.*, 2012: 110). Composite (total and overall average) scores for organisational commitment have however occasionally been reported: Hunton and Norman (2010) reported an alpha of 0.78 for Overall Average Commitment; Jain, Giga and Cooper (2009) report an organisational commitment coefficient alpha of 0.67 while Abbas and Khanam (2013) report a total commitment alpha of 0.84.

For the organisational climate scale, only the work environment coefficient was below 0.7 and this can be due to the few items (2) measuring the construct. The remaining items recorded coefficients above 0.70, with the total organisational climate coefficient alpha being 0.95. The summary inter-item variances and covariances for organisational climate are given in Table 3.8 below.

Table 3.8: Summary Item Statistics: Organisational Climate

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Variances	.582	.418	.767	.350	1.836	.014	11
Inter-Item Covariances	.355	.144	.692	.548	4.806	.015	11
Inter-Item Correlations	.610	.250	.915	.664	3.656	.026	11

3.3.5. Assessing Validity

The validity of a test concerns the content of the test (what the test measures) and how well it does so (Saunders, 2016). Factor analysis was used in evaluating content validity for the instrument. Factor analysis is a method of data reduction that seeks underlying unobservable (latent) variables that are reflected in the observed variables. Validity is appropriateness of measures used and accuracy of analysis for generalizability of results (Saunders, 2016). Construct validity is the extent to which a test actually measures a theoretical concept. A construct-validated instrument should

show high correlations with measures of the same construct (convergent validity), but low correlations with measures of different constructs (discriminant validity) (Anastasi & Urbina, 1997). A high internal consistency implies a high degree of generalizability (external validity) across the items within the study (Welman *et al.*, 2005).

3.3.5.1. Factor Analysis

A principal component analysis (PCA) which considers the total variance in the data including that found in the correlation coefficients and error variance was used. PCA is recommended when the primary concern is to determine the minimum number of factors that will account for the maximum variance in a data set. Initially, factorability of each of the 11 dimensions of organisational climate and 3 dimensions of organisational commitment were assessed. To determine whether factor analysis may be appropriate, the Kaiser Measure of Sample Adequacy (MSA), which gives an indication of the inter-correlations among variables, was computed (Tabachnick & Fidell, 2001). This index ranges from 0 to 1, reaching 1 when each variable is perfectly predicted by the other variables. The measure can be interpreted using Hair *et al.* (1998) guidelines, from meritorious (≥ 0.80) to unacceptable (< 0.50). As a general rule, MSA values closer to 1 are preferred, although the cut-off point for acceptability is 0.6 (Field, 2006). The Kaiser-Meyer-Olkin measure of sampling adequacy was computed for each dimension of organisational climate and organisational commitment (Table 3.9) and all were found to be acceptably above the suggested 0.6 minimum for factorability (Field, 2006; Neill, 1994) except for work environment and continuance commitment.

The KMO for organisational commitment (overall) was 0.906 suggesting factorability of the Organisational Climate construct, however, for organisational commitment, MSA was 0.441, lower than the minimum for factorability. Bartlett's Test of Sphericity, that tests the null hypothesis that the correlation matrix for the variables (the dimensions used) is an identity matrix, was computed for the scales. For both organisational climate and organisational commitment, Bartlett's Chi square was significant and their correlation matrices are not identity matrices ($\chi^2 = 958.318$, $p = 0.000$, $df = 55$ for organisational climate and $\chi^2 = 113.227$, $p = 0.000$, $df = 3$ for organisational commitment). The two scales met the minimum requirements for

factorability, thus principal component analysis was conducted. Table 3.9 shows the results of the PCA, with a summary of the variances explained by each component in the scale.

Table 3.9 follows on next page

Table 3.9: Total Variances Explained: Organisational climate and Organisational Commitment

	KMO- MSA	Communalities		Total Variance Explained							Rotation SS Loadings
		Initial	Extraction	Component	Initial Eigenvalues			Extraction SS Loadings			
					Total	% of Variance	Cum %	Total	% of Variance	Cum %	
Organisational Climate	0.91										
Trust	0.76	1	0.8547	1	7.2492	65.9016	65.90	7.2492	65.9016	65.9016	
Training development	0.74	1	0.5675	2	0.9374	8.5218	74.42				
Transformation diversity	0.82	1	0.8462	3	0.8019	7.2904	81.71				
Job satisfaction	0.76	1	0.7325	4	0.5523	5.0211	86.73				
Leadership	0.93	1	0.7848	5	0.4356	3.9601	90.69				
Employee wellness	0.66	1	0.5151	6	0.3147	2.8610	93.56				
Communication	0.83	1	0.8146	7	0.2173	1.9750	95.53				
Performance management	0.67	1	0.5805	8	0.1750	1.5910	97.12				
Teamwork	0.80	1	0.6738	9	0.1491	1.3558	98.48				
Work environment	0.50	1	0.2280	10	0.1040	0.9456	99.42				
Organisational image	0.79	1	0.6517	11	0.0634	0.5766	100.00				
Organisational Commitment	0.441										
Affectionate commitment	0.81	1	0.9260	1	1.8310	61.0321	61.0321	1.8310	61.0321	61.0321	1.8304
Continuance commitment	0.59	1	0.9966	2	1.0185	33.9501	94.9822	1.0185	33.9501	94.9822	1.0203
Normative commitment	0.80	1	0.9268	3	0.1505	5.0178	100				
Extraction Method: Principal Component Analysis.											

3.3.6. Testing the hypothesis

The aim of the study was to assess the influence of organisational climate on organisational commitment for a company delivering services to the mining industry. The research hypothesised that organisational climate has a positive influence on organisational commitment. To test this hypothesis, the relationship between organisational climate and organisational commitment was evaluated using correlation and regression analyses. Analyses of variances in the factors determining the relationship were also conducted in order to guide recommendations for increasing organisational commitment.

3.3.6.1. Correlations

Correlations describe relationships amongst variables and are interpreted using the correlation coefficient ranging from a perfect inverse relationship ($r=-1$) to a perfect direct relationship ($r=1$). Correlation coefficients estimate the extent of association but cannot be used to infer causality (Welman *et al.*, 2005). Pearson's product-moment correlation coefficient was used to identify relationships between variables, assessing sets of ordered pairs to obtain estimates of the directions and degrees of relationships. Correlation coefficients for the study are shown in Table 3.10.

Variables measuring organisational climate show a strong positive correlation with affectionate and normative commitments as well as an expected negative correlation with continuance commitment. The relationships between organisational climate (total average organisational climate) and affectionate, normative, and total commitment are strong and significant at the 5% significant level ($r=0.726$; 0.75 ; and 0.719 respectively), however that of organisational climate to continuance commitment is not significant ($r= -0.65$; $p>0.05$). Job satisfaction shows the strongest correlation with total commitment ($r=0.829$), while work environment has the weakest correlation to commitment ($r=0.239$). Other studies (Kaplan *et al.*, 2012; Gangai & Argawal, 2015; Suma & Lesha, 2013) have also found a positive relationship between job satisfaction and organisational commitment. A positive correlation between work environment and organisational commitment has been found in other studies (Danies *et al.*, 2013; Warsi, 2009; Noah, 2012). The weak correlation between work environment and

organisational commitment in this study can be explained by the weak Cronbach Alpha value for work environment as discussed in section 3.3.4.1 of this chapter.

The results of the correlation analysis confirm that organisational climate is positively associated with affectionate, normative and total commitment. At the 5% significance level the null hypothesis is rejected. There is a positive relationship between organisational climate and affectionate, normative as well as total commitment, except for continuance commitment.

Table 3.10 follows on next page

Table 3.10: Pearson Correlation coefficients, N=92; $p > |r|$; H0: $\rho = 0$

		Correlations																		
		trust	training development	transformation diversity	Job satisfaction	leadership	employee wellness	communication	performance management	team work	work environment	organisational image	Overall Average Climate	Total Climate	affectionate commitment	continuance commitment	normative commitment	continuance commitment_rev	commitment	
trust	Pearson Correlation	1																		
	Sig. (2-tailed)																			
training development	Pearson Correlation	.623**	1																	
	Sig. (2-tailed)	.000																		
transformation diversity	Pearson Correlation	.836**	.673**	1																
	Sig. (2-tailed)	.000	.000																	
Job satisfaction	Pearson Correlation	.799**	.696**	.801**	1															
	Sig. (2-tailed)	.000	.000	.000																
leadership	Pearson Correlation	.915**	.541**	.809**	.747**	1														
	Sig. (2-tailed)	.000	.000	.000	.000															
employee wellness	Pearson Correlation	.625**	.420**	.578**	.488**	.612**	1													
	Sig. (2-tailed)	.000	.000	.000	.000	.000														
communication	Pearson Correlation	.853**	.594**	.837**	.680**	.847**	.657**	1												
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000													
performance management	Pearson Correlation	.640**	.517**	.657**	.502**	.569**	.723**	.738**	1											
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000												
team work	Pearson Correlation	.751**	.623**	.709**	.692**	.761**	.498**	.712**	.534**	1										
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000											
work environment	Pearson Correlation	.296**	.416**	.431**	.329**	.294**	.250**	.328**	.367**	.443**	1									
	Sig. (2-tailed)	.004	.000	.000	.001	.005	.016	.001	.000	.000										
organisational image	Pearson Correlation	.720**	.615**	.752**	.764**	.616**	.529**	.652**	.550**	.532**	.421**	1								
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000									
Overall Average Climate	Pearson Correlation	.919**	.752**	.914**	.847**	.882**	.727**	.900**	.768**	.820**	.505**	.802**	1							
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000								
Total Climate	Pearson Correlation	.919**	.752**	.914**	.847**	.882**	.727**	.900**	.768**	.820**	.505**	.802**	1.000**	1						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000							
affectionate commitment	Pearson Correlation	.652**	.587**	.696**	.800**	.614**	.437**	.565**	.527**	.551**	.317**	.695**	.726**	.726**	1					
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000						
continuance commitment	Pearson Correlation	-.137	-.097	-.072	-.212	-.134	.038	.046	.118	-.101	-.020	.019	-.065	-.065	-.111	1				
	Sig. (2-tailed)	.194	.358	.496	.042	.204	.716	.664	.263	.337	.852	.859	.539	.539	.292					
normative commitment	Pearson Correlation	.677**	.521**	.708**	.760**	.604**	.507**	.671**	.523**	.561**	.169	.658**	.720**	.720**	.830**	.071	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.107	.000	.000	.000	.000	.502				
continuance commitment_rev	Pearson Correlation	.137	.097	.072	.212	.134	-.038	-.046	-.118	.101	.020	-.019	.065	.065	.111	-1.000**	-.071	1		
	Sig. (2-tailed)	.194	.358	.496	.042	.204	.716	.664	.263	.337	.852	.859	.539	.539	.292	.000	.502			
commitment	Pearson Correlation	.690**	.567**	.702**	.829**	.635**	.440**	.578**	.460**	.572**	.239	.642**	.719**	.719**	.918**	-.395**	.855**	.395**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.022	.000	.000	.000	.000	.000	.000	.000		

3.3.6.2. Regression analysis

Linear regressions were used to complement the correlation analyses evaluating the extent to which organisational climate factors predict affective commitment (AC), continuance commitment (CC) and normative commitment (NC) as well as total commitment for the sample. The results of the linear regression analyses are presented in Table 3.11. Organisational climate factors are significant predictors of at least affectionate and normative commitment and also total commitment although few of the factors predict more than 50% of the variation in commitment individually (using simple linear regression). Using Ellis and Steyn's (2003) guide to interpreting practical significance, a considerable number of the factors explain more than 25% of the variation and thus can also be considered practically important. R² ranged from a minimum of 0.057 using work environment as a commitment predictor to a maximum of 0.687 when Job satisfaction in isolation is used to predict total commitment. The prediction of continuance commitment by organisational climate factors is however both low and generally not of statistical significance except in the case of transformation and diversity as well as job satisfaction (R² of 0.005 and 0.045 respectively).

Table 3.11: Multiple regression analysis for organisational climate and commitment

Independent Variables	Dependant variables							
	Commitment	sig	ACS	sig	CCS	sig	NCS	sig
Overall Average Climate	0.517	0.000	0.527	0.000	0.004	0.539	0.519	0.000
Trust	0.477	0.000	0.425	0.000	0.019	0.194	0.458	0.000
Training and Development	0.322	0.000	0.344	0.000	0.009	0.358	0.271	0.000
Transformation and Diversity	0.493	0.000	0.484	0.000	0.005	0.496	0.502	0.000
Job satisfaction	0.687	0.000	0.640	0.000	0.045	0.042	0.578	0.000
Leadership	0.403	0.000	0.377	0.000	0.018	0.204	0.365	0.000
Employee Wellness	0.194	0.000	0.191	0.000	0.001	0.716	0.257	0.000
Communication	0.334	0.000	0.319	0.000	0.002	0.664	0.450	0.000
Performance Management	0.212	0.000	0.278	0.000	0.010	0.337	0.274	0.000
Teamwork	0.327	0.000	0.303	0.000	0.014	0.263	0.315	0.000
Work environment	0.057	0.000	0.101	0.002	0.000	0.852	0.029	0.107
Organisation Image	0.412	0.000	0.483	0.000	0.000	0.859	0.433	0.000
Multiple regression (11 Organisational Climate Factors)- Adjusted R ²	0.659	0.000	0.647	0.000	0.116	0.030	0.634	0.000

From table 3.11, the eleven components of organisational climate are shown to predict 65.9% of the variation in total commitment when a multiple regression model involving all factors is developed. Of the 65.9%, trust alone predicts 47.7% and job satisfaction 13%, the remaining factors predicting only 5% of the variation in commitment (Table 3.12). This suggests that trust would play a critical role in management efforts to build commitment and any attempts to address commitment within the firm, would do well to focus on building organisational trust. Research has shown that employee trust on the employer/organisation contributes significantly to the development of organisational commitment, in particular affective and normative commitments (Bagram & Hime, 2007; Colquitt, Scott & LePine, 2007).

Table 3.12: Parameter estimates for commitment against organisational climate

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Type I SS	Type II SS	Standardized Estimate	Squared Semi-partial Corr Type I
Intercept	1	3.73226	0.71081	5.25	<.0001	8013.60001	22.82426	0	.
trust	1	0.17718	0.34030	0.52	0.6040	105.27246	0.22443	0.09963	0.47662
Training_Development	1	-0.08045	0.20909	-0.38	0.7014	6.82523	0.12257	-0.03663	0.03090
Transformation_Diversity	1	0.40250	0.33368	1.21	0.2313	6.81224	1.20461	0.18008	0.03084
Leadership	1	-0.08072	0.32838	-0.25	0.8065	0.09048	0.05002	-0.04473	0.00040964
Employee_wellness	1	0.03399	0.18716	0.18	0.8563	0.06615	0.02731	0.01750	0.00029948
Communication	1	-0.24833	0.28849	-0.86	0.3919	3.86713	0.61342	-0.13394	0.01751
Performance_mangement	1	0.14544	0.23995	0.61	0.5461	0.00725	0.30415	0.06720	0.00003285
Teamwork	1	-0.01164	0.24692	-0.05	0.9625	0.10196	0.00184	-0.00520	0.00046162
Work_environment	1	-0.13426	0.16608	-0.81	0.4213	1.38199	0.54102	-0.06185	0.00626
Job_satisfaction	1	1.49723	0.26465	5.66	<.0001	30.19293	26.49719	0.75196	0.13670
Organisation_Image	1	-0.04757	0.27314	-0.17	0.8622	0.02512	0.02512	-0.01974	0.00011371

3.3.6.3. Analysis of variance (ANOVA)

A final analysis involved assessing the effect of demographic factors on commitment, and particularly by means of an analysis of variance, evaluating the significance of the differences in mean commitments amongst age groups, gender, departments, entities and levels within the organisation. Notable is how the variations in perception of overall organisational climate and exhibition of affectionate commitment are significant across age and gender lines (Table 3.13). Like other studies (Affum-Osei, 2015; Jena, 2015;

Van Dyk, 2011), the correlations between commitment and age as well as gender are weak in this research, however as Kaur and Sandhu (2010:142) indicate, a number of studies have also shown that employee work attitudes differ across career stages. The age variations and associated variation in affectionate commitment as well as overall perception of organisational climate seem thus most plausibly explained by career-stage theory and its suggestions that the early-stagers (between 20 and 40 years) are associated with the explorative phase of life, and tend to exhibit higher intentions to leave or greater willingness to relocate than those in other age groups (Kaur & Sandhu, 2010). Based on career-stage theory (Levinson *et al.*, 1978; Super, 1957), early-stagers are unlikely to settle on one job too long, possibly having little time to develop necessary attachments (affection) to the organisation to exhibit any inclination to be affectionately committed. Age is thus expected to determine organisational commitment at least in the early stages.

Table 3.13: Analysis of Variance in commitment across demographic groups

	Sum of Squares	df	Mean Square	F	Sig.(p value)	Partial Eta Squared
Overall_Average_Climate * Age	5.833	3	1.944	6.031	.001	.171
affectionate_commitment * Age	4.615	3	1.538	3.135	.029	.097
continuance_commitment * Age	2.053	3	.684	2.043	.114	.065
normative_commitment * Age	4.199	3	1.400	2.470	.067	.078
commitment * Age	29.360	3	9.787	4.503	.005	.133
Overall_Average_Climate * Gender	2.269	1	2.269	6.393	.013	.066
affectionate_commitment * Gender	4.954	1	4.954	10.407	.002	.104
continuance_commitment * Gender	1.177	1	1.177	3.489	.065	.037
normative_commitment * Gender	4.545	1	4.545	8.263	.005	.084
commitment * Gender	29.578	1	29.578	13.935	.000	.134
Overall_Average_Climate * language	1.817	4	.454	1.220	.308	.230
affectionate_commitment * language	3.143	4	.786	1.531	.200	.256
continuance_commitment * language	2.822	4	.705	2.137	.083	.299
normative_commitment * language	5.946	4	1.486	2.688	.036	.332
commitment * language	12.380	4	3.095	1.293	.279	.237
Overall_Average_Climate * years_of_service	.127	3	.042	.109	.955	.061
affectionate_commitment * years_of_service	.712	3	.237	.444	.722	.122
continuance_commitment * years_of_service	2.238	3	.746	2.241	.089	.266
normative_commitment * years_of_service	1.319	3	.440	.734	.535	.156
commitment * years_of_service	5.198	3	1.733	.708	.550	.153
Overall_Average_Climate * education_level	2.140	3	.713	1.936	.130	.250
affectionate_commitment * education_level	2.448	3	.816	1.567	.203	.226
continuance_commitment * education_level	2.614	3	.871	2.625	.056	.288
normative_commitment * education_level	4.980	3	1.660	2.943	.037	.304
commitment * education_level	26.923	3	8.974	4.031	.010	.349
Overall_Average_Climate * Organisational_level	1.556	5	.311	.789	.560	.214
affectionate_commitment * Organisational_level	2.184	5	.437	.793	.558	.215
continuance_commitment * Organisational_level	2.943	5	.589	1.728	.137	.309
normative_commitment * Organisational_level	1.203	5	.241	.377	.863	.150
commitment * Organisational_level	13.467	5	2.693	1.070	.383	.247
Overall_Average_Climate * Legal_entity	1.371	4	.343	.908	.463	.200
affectionate_commitment * Legal_entity	.623	4	.156	.287	.885	.114
continuance_commitment * Legal_entity	1.059	4	.265	.756	.557	.183
normative_commitment * Legal_entity	.246	4	.061	.099	.982	.067
commitment * Legal_entity	4.012	4	1.003	.403	.806	.135
Overall_Average_Climate * Department	2.686	5	.537	1.404	.232	.282
affectionate_commitment * Department	4.241	5	.848	1.585	.174	.299
continuance_commitment * Department	3.210	5	.642	1.901	.103	.324
normative_commitment * Department	2.590	5	.518	.828	.534	.220
commitment * Department	22.501	5	4.500	1.851	.112	.320
Overall_Average_Climate * Area	.157	1	.157	.411	.523	.068
affectionate_commitment * Area	.504	1	.504	.949	.333	.103
continuance_commitment * Area	.127	1	.127	.364	.548	.064
normative_commitment * Area	.652	1	.652	1.097	.298	.110
commitment * Area	3.523	1	3.523	1.444	.233	.126

3.3.6.4. Effect size estimates

When analysing variances, Ellis and Steyn (2003) argue that it is important not only to consider statistical significance of variations as depicted by the p-value, but also to consider the practical significance of differences measured as indicated by various measures of effect size. Statistical significance tests tend to yield small p-values (indicating significance) when large samples are used, yet in small samples, tend to report large p-values (suggesting insignificance of variance) overlooking the possible existence of differences nonetheless. Further, statistical significance may not necessarily mean practical importance of the research since statistical significance is a function of sampling and sample size (Ellis & Steyn, 2003). Effect sizes on the other hand indicate practical significance, the extent to which a difference is large enough to have an effect in practice (Steyn, 2009). The effect size is independent of sample size and is a practical measure of significance. Common measures of effect size in dealing with analysis of variance (ANOVA) models are the Eta squares, Partial Eta Square and Omega Squared. Another standardised measure of effect size, based on standard deviations is the Cohen's "d" measure and this can be used in describing differences in means as well as multiple regression fits (Ellis & Steyn, 2003). Effect sizes were reported for the analysis of variance using Partial Eta squared (Table 3.13) and being interpreted using Cohen's (1988) rule of thumb where $\eta^2 = 0.1$ is a small effect; 0.06 a moderate effect and greater than 0.14 a large effect for ANOVA and MANOVA. All the variations are moderate to large in effect albeit some are statistically insignificant.

A further analysis of the effect of years of service and department on commitment was conducted. The departments were reduced from the original seven categories to four groups (variable name "AFD") representing Finance in group 1; Engineering in group 2; Procurement, Logistics, Production and Workshop in group 3 as well as Admin-General in group 4. For years of service, three groups were used with group 1 representing 0-1 year of service, group 2 representing 2-5 years of service and group 3 for 6 years of service and longer. Analysis of variance was conducted to test the difference in mean commitment for the groups and the effect sizes for the differences are reported in Table 3.13. Using Tukey's honestly significant test of differences (Barros, 2013), only two groups show truly significant and thus practically important differences. Mean perception of leadership varies significantly amongst groups 1 and

3 for the departments (that is, Finance and the Production group), while perception of performance management varies significantly between groups 2 and 3 for years of service (that is, 2-5 years and the 6 years and longer group).

Table 3.14: Cohen's “d” effect sizes for department and years of service

Group_i	Group_jl	Trust	Training development	Transformation diversity	Job satisfaction	Leadership	Employee wellness	Communication	Performance management	Teamwork	Work environment	Organisational image	Affectionate commitment	Continuance commitment	Normative commitment	Commitment
Effect sizes for AFD																
1	2	-0.51	-0.17	-0.23		-0.65	-0.15	-0.26	-0.04	-0.38	-0.13	-0.37	-0.42	0.5	-0.28	-0.53
1	3	-0.5	0.06	-0.26		***-0.6	-0.25	-0.21	0.01	-0.64	-0.02	-0.14	-0.07	-0.07	-0.2	-0.11
1	4	-0.63	-0.03	-0.2		-0.55	-0.08	-0.19	0.17	-0.25	0.05	-0.43	-0.42	0.58	-0.23	-0.47
2	3	-0.09	0.22	-0.05		-0.12	-0.05	0.07	0.05	-0.18	0.08	0.15	0.24	-0.56	0.08	0.38
2	4	-0.11	0.14	0.08		0.11	0.07	0.15	0.14	0.19	0.17	-0.07	0	-0.02	0.09	0.07
3	4	0	-0.09	0.12		0.2	0.12	0.09	0.1	0.42	0.06	-0.2	-0.24	0.66	0.01	-0.33
F		2.37	0.22	0.54		3.02	0.24	0.59	0.12	2.15	0.09	0.91	1.01	2.56	0.48	1.78
Pr>F		0.077	0.883	0.656		0.034	0.871	0.625	0.947	0.0996	0.965	0.442	0.391	0.061	0.698	0.157
Effect sizes for year																
1	2	0.06	-0.34	-0.34		0.17	-0.14	-0.02	-0.25	0.04	-0.25	-0.01	0.29	0.19	0.38	0.25
1	3	-0.13	-0.38	-0.38		-0.05	-0.04	0.07	0.21	-0.01	0.32	0.21	0.19	0.67	0.25	-0.04
2	3	-0.16	-0.04	-0.04		-0.2	0.11	0.08	***0.57	-0.04	0.52	0.17	-0.1	0.45	-0.15	-0.28
F		0.28	1.01	0.09		0.57	0.21	0.07	3.12	0.03	2.73	0.34	0.67	2.94	1.11	1.01
Pr>F		0.756	0.369	0.911		0.565	0.810	0.932	0.049	0.971	0.071	0.711	0.513	0.058	0.333	0.370
Significant differences between groups, evaluated using Tukey's HSD measure are shown by ***																

3.3.7. Opinion on organisational assets and liabilities

The open-ended question was analysed for themes based on the content of responses. Only 40 of the 92 respondents completed the open-ended question. No statistical analyses were conducted for this question however themes emerging from the responses to the question provided a reasonable basis for explaining some of the observed relationships amongst the core variables studied, that is, organisational climate and organisational commitment. Table 3.15 shows a summary of themes emerging and the frequencies with which these were cited.

Table 3.15: Themes on organisation’s assets and liabilities

	THEMES	Cumm %	COUNT	CONTENT/ KEY TERMS
ASSETS	People	49%	20	people, employees
	Technology	12%	5	machines, technology, operational equipment, innovative technology, plant
	Money	10%	4	money, cash, stock, accounts; pursuit of profit at all cost, profit
	Knowledge	10%	4	skill, competence, problem solving ability, top management ability, expertise
	Opportunity	7%	3	opportunity, quality resources, niche market
	Stability	5%	2	consistency, stability
	Relationships	7%	3	commitment, loyalty, relationships
LIABILITIES	People	11%	3	people
	Planning	11%	3	lack of planning, making sure of smooth operating, breakdowns, no pending contracts,
	People management	22%	6	Job-work mismatch, free-riders on hard workers, hardworking employees overlooked, no acknowledgement for hard work and loyalty, favouritism in job advancements, no care for employees, low morale; employee burnout
	Communication	7%	2	poor communication, management communications,
	Knowledge	11%	3	specialisation, no competent people with degrees, lack of skill
	Management	37%	10	management style, top management congruence with employees, top management compliance, crisis management style, micro-management, way of doing things

An evaluation of the issues cited indicates that people and people management are the key concerns for the organisation. Both as assets and liabilities, people are viewed by respondents as constituting the greatest potential both for organisational success (as assets) and failure (through poor people management skills).

3.4. Summary

In this chapter, the results of the study were presented and analysed. A discussion of the relevance of each result and possible explanations for various observed phenomena were given. In summarising these results, the study has drawn analyses from a sample of 92 respondents in a survey of 127 purposely chosen participants to evaluate the effect of organisational climate on organisational commitment. A questionnaire with three sections was used to gather demographic data and data on the eleven dimensions of the organisational climate construct as well as the three dimensions measuring the organisational commitment construct. The results showed that there is a positive association between organisational climate, its factors and

organisational commitment and managed to point out areas of the organisational climate that need improvement in order to enhance organisational commitment.

Chapter four summarises and draws conclusions from the findings of the research then concludes by making recommendations for the company as well as for future research.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

4.1. Introduction

The primary objective of this research was to assess organisational climate as a predictor of organisational commitment in a South African company delivering services to the mining industry. In determining the influence of organisational climate on organisational commitment, the research specifically sought to analyse the current organisational climate of the organisation, to analyse the current level of organisational commitment and eventually to make recommendations on how to improve organisational climate of the organisation where the climate is found to be unfavourable. This chapter summarises the main findings and conclusions drawn from the outcomes of the research and makes recommendations for the management of organisational commitment in the organisation.

4.2. Main findings from the statistical analysis

The primary objective of this study was to assess organisational climate as a predictor of organisational commitment in a mining services provider. The secondary objectives were to analyse the organisation's organisational climate and organisational commitment and make recommendations on how to improve organisational climate.

4.2.1. Current perception of the organisational climate by employees (RQ1)

The current organisational climate was determined to be positive based on employee perceptions. However, while the overall organisational climate perception is positive, training and development; employee wellness and performance management are negatively perceived.

Employee perception of performance management and employee wellness is negative calling for the development of open feedback channels and fair or transparent measures to manage employee performance. This negative perception of performance management is in particular contrast to the perception of communication

and trust which are both positive. A major contributor to this poor perception of performance management could be explained by recent changes in the company's policy on performance evaluation (introduced in 2016) that has seen performance evaluation being tied directly to remuneration and rewards. Management linked salary increases with performance evaluation outcomes for the first time in that year whereas past increases were provided evenly across all subsidiaries and functions of the organisation. Any increase in employee remuneration is now directly proportional to the performance rating and employees fear that they are deliberately rated lowly to avoid the need to make salary increases. The difference in perception of performance management was also found to be significant at least in employees that have worked at least two years in the organisation. Performance management was significantly negatively perceived by employees in the 2-5 years (group 2) as well as 6+years (group 3). Of the three groups, the 2-5 years of service group, (52 % of the sample) recorded the lowest mean perception of performance management. This observation is understandable, given the recent change in performance management system. This group likely experiences the negative effect of the changes more strongly than the new employees who have no past experience with which to compare their present terms of service. Rank-orders of the dimensions of organisational climate are presented in Table 4.1 where climates are split and ranked as positive and negative dimensions. An organisational climate dimension is considered positive if the mean score is more than 3.2 and negative if the mean is less than 3.2 (Castro, 2008).

Table 4.1: Organisational climate dimension rank-order

Organisation Climate Dimension	Mean	Ranking
Positive Dimension		
Work environment	3.85	1
Organisational image	3.85	1
Leadership	3.73	2
Job satisfaction	3.47	3
Trust	3.46	4
Team work	3.45	5
Transformation diversity	3.39	6
Overall Average Climate	3.39	6
Communication	3.30	7
Negative Ranking		
Performance management	2.85	1
Training development	2.93	2
Employee wellness	2.99	3

Cross examination of the responses to the open-ended question provided answers to the question of a low perception of employee wellness despite a positive perception of work environment, organisational image and leadership. Poor work life balance was cited as a major contributing factor with management expectation of employees being impractical. The expectation of a full devotion of employee time to the organisation (this being part of a requirement communicated to every employee on entry) suggests the company has no effective measures to keep employees motivated and refreshed, burnout and low morale being cited in the open-ended question. The ambiguity of roles when it comes to employee management levels and general lack of structure in work suggests that the burnout experienced could be emanating from work overload on a few individuals owing to the absence of direct lines of accountability and clearly defined key performance measures.

The results further indicate that employee perception of the work environment, organisational image, and leadership are positive (refer Figure 4.1). Management can leverage on this aspect to address areas of weakness such as employee wellness and the poor perception of performance management. Organisational trust in particular was found to be a key determinant of commitment. This positive perception of organisational trust provides the basis for management efforts to rectify some poor perceptions that could detract from commitment. In particular, efforts to build on the

trust dimension may be fundamental to maintaining or increasing the levels of commitment amongst employees.

The general view that management has no concern for employee well-being and development as supported by the poor perception of training and development can be addressed. Employees' perceptions of a lack of organisational support are central to understanding and managing the commitment development process (Spence Laschinger *et al.*, 2012). The results of the study indicated that most employees felt they lacked the organisation's support regarding training and development and employee wellness. The need for management training has already been identified and the organisation is working on formalising a system of reviewing personal development plans that will enable the organisation to both monitor employee development and provide motivation as necessary. Training has previously not been a priority, with the focus of training having been operational. Considering the survey responses were largely from management who have experienced the lack of programs designed for management development, the poor training perception is expected. The perception of the operational workforce on this dimension of organisational climate could well be different and may lead to different results if they are included in the sample. Talent management has been identified as key to employee retention and the management of human capital (Kibui, Gachunga & Namusonge, 2014) This can be extended to building at least normative commitment amongst employees.

4.2.2. Current level of organisational commitment (RQ2)

While there are no criteria for determining acceptable scores for commitment, the commitment profile can be used to evaluate the current commitment against the ideal. An ideal commitment profile is one in which affectionate commitment and normative commitment exceed continuance commitment. The current level of commitment resembled this ideal profile in that mean affectionate and normative commitment scores exceeded the mean continuance commitment score as discussed in Section 3.3.2.

4.2.3. The relationship between organisational climate and organisational commitment (RQ3)

Reliabilities for ten of the eleven dimensions of organisational climate, and two of the three dimensions of organisational commitment tested quite adequately above 0.70. Overall, the scales were considered reliable for the sample and no items were excluded from the analyses. Organisational climate was shown to be positively associated with organisational commitment. The association was determined to be positive and significant in the case of affectionate and normative commitment hence the rejection of the null hypothesis and conclusion that organisational climate does have an influence on organisational commitment. This however was not the case for continuance commitment which exhibited a negative but insignificant correlation with organisational climate. In the case of continuance commitment, the results failed to reject the null hypothesis and conclude that organisational climate is not significantly associated with continuance commitment.

4.3. Evaluation of the research

The primary objective of this study was to assess organisational climate as a predictor of organisational commitment in a mining services provider. This objective was met by means of Pearson's correlation coefficient and regression analyses. The null hypothesis was consequently rejected.

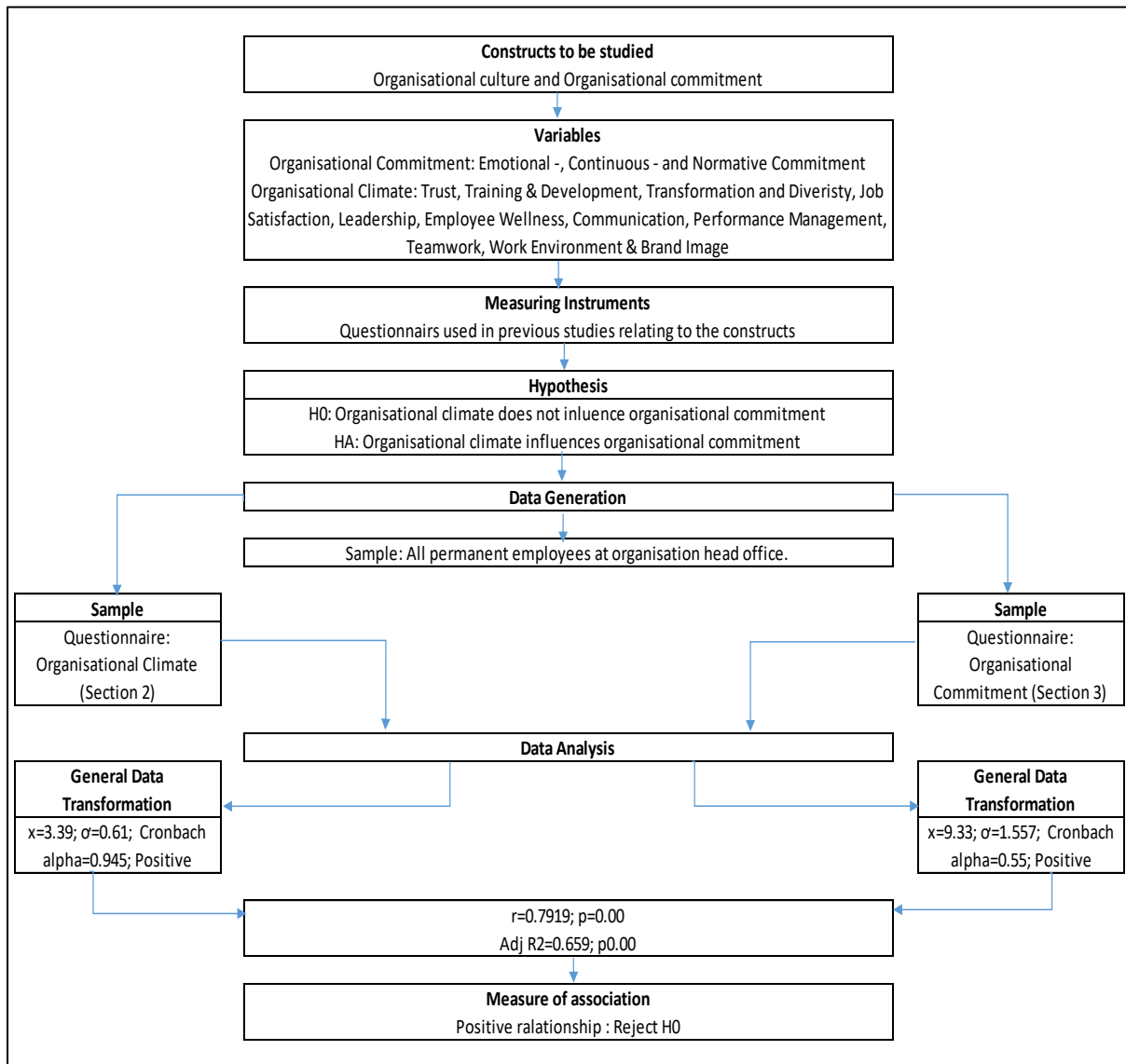
The secondary objectives were:

- i. Analyse the current organisational climate of the organisation
- ii. Analyse the current organisational commitment in the organisation
- iii. Make recommendations on how to improve organisational climate of the organisation

Secondary objective i and ii were met by calculating means of organisational climate and organisational commitment respectively and comparing these means with the best practice. It was found that overall organisational climate and organisational commitment were positive.

Secondary objective iii was met by means of analysis of the literature review and the results of the empirical investigation and is presented in section 4.4 and a summary of the evaluation is presented in figure 4.1 below.

Figure 4.1: Summary of the evaluation.



4.4. Recommendations for improving organisational climate and increasing organisational commitment (RQ4)

Recommendations to the organisation drawn from the research are summarised below:

- The organisation needs to leverage on positive trust and leadership perceptions to build on commitment. The basis for nurturing affectionate and normative commitment has been shown to exist based on the current positive perceptions of organisational trust and job satisfaction. Efforts to build on these aspects are expected to bring about the desired improvement in employees' organisational commitment.
- While employees tend to develop measures to maintain performance and cope with burnout (Demerouti, Bakker & Leiter, 2014), it is recommended that a clearly defined structure, with clear role definition be developed at least in part to address job overload due to role conflict. This will not only address the feeling that some employees are "free-riding" on the performances of a few, but will also permit clear and objective evaluation of individual performance.
- There is need to develop clear and transparent performance management policy. Particularly, a review of the system for rewards and remuneration is called for. While the need to manage employees by objective outcome is acknowledged, the application of performance based reward systems in the absence of transparency is at the least likely to be controversial.
- The organisation must develop a system for identifying and satisfying employee training and development needs, and
- There is an overall need to improve people management skills as well as to address issues of employee motivation to curb low morale and improve poor work life balance.

4.5. Recommendations for future research

The present study, due to time and resource constraints, focused on the head office of the organisation only. The composition of the head office in terms of organisational level differs from that of other divisions, particularly site operations. The results of the study are thus a representation of largely middle and lower management perception. Future studies can include the entire company, taking into account both site and international operations to evaluate their climates (or sub-climates) and how they relate to organisational commitment.

This study should also be performed in other organisations in different industries, especially in a South African framework. Organisational commitment has been cited as one of the factors that significantly improve productivity. South Africa is experiencing relatively low labour productivity levels when compared to other countries (De Vries & Erumban, 2015) and therefore, a study on how to improve organisational commitment will be useful.

4.6. Conclusion

The research sought to establish the current organisational climate in a company providing services to the mining industry. It further sought to evaluate the level of organisational commitment. Having successfully evaluated the current perception of organisational climate and developed a commitment profile for the organisation, the research successfully demonstrated the association between organisational climate and organisational commitment in the company and drew recommendations for management to improve commitment amongst employees.

LIST OF REFERENCES

Abbas, Q. & Khanam, S. J. 2013. Psychometric Properties of Urdu Translation and Adaptation of Organizational Commitment Questionnaire (OCQ) In Pakistan. *Asian Journal of Education*, 2(4):240-249.

Adenike, A. 2011. Organisational Climate as a Predictor of Employee Job Satisfaction: Evidence from Covenant University. *Business Intelligence Journal*, 4(1):151-165.

Affum-Osei, E., Acquah, E. & Acheampong, P. 2015. *American Journal of Industrial and Business Management*, 5:569-778

Anderson, J. & Zbirenko, A. 2014. Effect of Organisational Structure, Leadership, and Communication on Efficiency and Productivity. <http://www.diva-portal.org/smash/get/diva2:735889/fulltext01.pdf> Date of access: 19 Nov. 2016.

Africa, M.R. 2014. Effects of the Mining Strike on the South African Economy. <https://www.miningreview.com/news/effects-of-the-mining-strikes-on-the-south-african-economy/> Date of access: 16 Oct. 2016.

Alan, N.M.J. 1992. Commitment to Organisations and Occupations: Extension and Test of Three-Component Conceptualisation. *Academy of Applied Psychology*, (78):538-551.

Aling, P., Black, T., Holland, D., Kantor, B. & Sharp, L. 2012. South Africa's Most and Least Productive Workforces. http://www.prophet.co.za/wp-content/uploads/2013/06/Labour_Market_Navigator_2012Q31.pdf Date of access: 7 Mar. 2016.

Allen, N. & Meyer, J. 2004. TCM Employee Commitment Survey: Academic Package. <http://employeecommitment.com/TCM-Employee-Commitment-Survey-Academic-Package-2004.pdf> Date of access: 30 Mar. 2016.

Anastasi, A. & Urbina, S. 1997. Psychological testing. 7th Ed. New York: Prentice Hall, Inc. 721 p.

Anderson, C. & Brown, C. E. 2010. The functions and dysfunctions of hierarchy. Research in Organizational Behaviour. *ScienceDirect*, 27(1):1-35.
<http://haas.berkeley.edu/faculty/papers/anderson/functions%20and%20dysfunctions%20of%20hierarchy.pdf> Date of access: 10 Nov. 2016.

Anderson, F.P., Orife, J.N. & Slack, F.J. 2014. The Three Types of Organisational Commitment of Employees.
<http://www.employmentcrossing.com/employers/article/900006766/The-Three-Types-of-Organizational-Commitment-of-Employees/> Date of access: 21 Aug. 2016.

Bagraim, J. J. & Hime, P. 2007. The dimensionality of work place interpersonal Trust and its relationship to workplace affective Commitment. *SA Journal of Industrial Psychology*, 33(3):43-48.

Bagraim, J.J. 2003. The dimensionality of professional commitment. *SA Journal of Industrial Psychology*, 29(2):6-9.

Bahrami, M.A., Barati, O., Ezzatabati, M.R., Ghoroghchian, M. & Montaer-alfaraj, R. Role of Organisational Climate on Organisational Commitment: The Case of Teaching Hospitals. http://ac.els-cdn.com/S2210909915300850/1-s2.0-S2210909915300850-main.pdf?_tid=ecc6a61e-d241-11e5-a29d-00000aab0f26&acdnat=1455361809_c17bfa99386f6386af0552ff0d55371a Date of access: 13 Feb. 2016.

Baker, M.C. & Coetzee, M. 2015. Career Anchors, Organisational Commitment and Employee Turnover in the Retail Sector. *South African Journal of Labour Relations*. 39(2):105-122.
<http://eds.b.ebscohost.com.nwulib.nwu.ac.za/eds/detail/detail?sid=afc8079c-8320-42c1-89f6-89524987d541%40sessionmgr120&vid=0&hid=120&bdata=JnNpdGU9ZWRzLWxpdmU%3d#AN=edssas.labour.v39.n2.a6&db=edssas> Date of access: 30 Mar 2016.

Barros, F. 2013. ANOVA and Turkey's Test on R. <https://www.r-bloggers.com/anova-and-tukeys-test-on-r/> Date of access: 19 Nov. 2016.

Bashir, N.A. & Jehanzeb, K. 2013. Training and Development Program and its Benefits to Employee and Organisation: A Conceptual Study. *European Journal of Business Management*, 5(2):243-252.
http://s3.amazonaws.com/academia.edu.documents/32182244/3947-5999-1-PB.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1478955070&Signature=lt2pnsbpXvC5rqmzWDc89YYuhs4%3D&response-content-disposition=inline%3B%20filename%3DTraining_and_Development_Program Date of access: 12 Nov 2016.

Basset, K. 2014. How Important in Internal Communication in My Business? <http://www.entrepreneurmag.co.za/ask-entrepreneur/hiring-and-managing-staff-ask-entrepreneur/how-important-is-internal-communication-in-my-business/> Date of access: 6 Nov. 2016.

Bengel, J., Korner, M., Goritz, A.S. & Wirtz, M.A. 2015. Relationship of Organisational Culture, Teamwork and Job Satisfaction in Interprofessional Teams. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4477418/> Date of access: 6 Nov. 2016.

Betanzos, N. & Paz, F. Benefits of Normative Commitment for Organisations. <http://direccionestrategica.itam.mx/en/beneficios-del-compromiso-normativo-para-las-organizaciones/> Date of access: 31 Oct. 2016.

Beukes, I. & Botha, E. 2013. Organisational commitment, work engagement and meaning of work of nursing staff in hospitals. *SA Journal of Industrial Psychology*, 39(2):1-10. <http://dx.doi.org/10.4102/sajip.v39i2.1144>

Bhaesajsanguan, S. 2010. The Relationships among Organizational Climate, Job Satisfaction and Organizational Commitment in the Thai Telecommunication Industry. http://www.g-casa.com/conferences/singapore/papers_in_pdf/wed/Sangu.pdf Date of access: 25 Feb. 2016.

Bitsani, E. 2013. Theoretical Approaches to the Organisational Culture and the Organisational Climate: Exploratory Research and Best Policies in Health Care Services. *Journal of Human Resource Management*, 4(1):48-58. http://s3.amazonaws.com/academia.edu.documents/33175693/10.11648.j.jhrm.20130104.11.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1478952946&Signature=EiK9IRqvdoeiLt74pon4J5craEI%3D&response-content-disposition=inline%3B%20filename%3DJournal_of_Human_Re Date of access: 12 Nov 2016.

Blair, J. 2012. A Positive Work Climate: It's the Real Key to Organisational Success. S.I.: Talent Management and HR. <http://www.eremedia.com/tlnt/a-positive-work-climate-its-the-real-key-to-organizational-success/> Date of access: 20 Sep. 2016.

Brigit, S. & Van Veldhoven, J.P.M. 2010. Group Leadership Climate and Individual Organisational Commitment. *Journal of Personnel Psychology*, 9(2):57-68.

Bringham, J.B., Mitchel, B.W., Bishop, D.G. & Allen, N.J. Working for a Higher Purpose: A Theoretical Framework for Commitment to Organisation-sponsored Causes. *Human Resource Management Review*, 23(2):174-189. https://scholar.google.co.za/scholar?q=why+meyer+and+allen%27s+three+dimensional+commitment+model&btnG=&hl=en&as_sdt=0%2C5&as_ylo=2012&as_vis=1 Date of access: 12 Nov. 2016.

Brown, B. 2003. Employees' Organizational Commitment and Their Perception of Supervisors' Relations-Oriented and Task-Oriented Leadership Behaviours. Falls Church, VA: Faculty of the Virginia Polytechnic Institute and State University.

Brown, J.D. 1997. Skewness and Kurtosis. *JALT Testing & Evaluation SIG Newsletter*, 1(1):20-23.

- Buttigieg, D.I.R. 1999. Affective, Normative & Continuance Commitment: Can the 'Right Kind' of Commitment be Managed? *Journal of Management Studies*, 36(3):307-333.
- Castro, M.L. 2010. The Relationship between Organisational Climate and Employee Satisfaction in a South African Information and Technology Organisation. *South African Journal of Industrial Psychology*, 36(1):800-809.
- Cheng, C. & Liou, S. 2010. Organisational Climate, Organisational Commitment and Intention to Leave amongst Hospital Nurses in Taiwan. *Blackwell Publishing*, 10(1):1635-1644.
- Chowwen, C. 2012. Predictors of Organisational Commitment of Factory Employees. *Ife Psychology*, 20(2):185-191.
- Coetzee, M. & Mensele, C. 2014. Job Embeddedness, Organisational Commitment and Voluntary Turnover of Academic Staff at a Higher Education Institution in South Africa. *South African Journal of Labour Relations*, 38(1):9-30.
<http://eds.b.ebscohost.com.nwulib.nwu.ac.za/eds/detail/detail?sid=271e7443-be22-43af-9ff7-ef98426f3963%40sessionmgr105&vid=0&hid=120&bdata=JnNpdGU9ZWRzLWxpdmU%3d#AN=edssas.labour.v38.n1.a2&db=edssas> Date of access: 21 Sep. 2016.
- Cohen, J. 1988. Statistical power analysis for behavioural sciences. Second edition. Hillsdale, NJ: Erlbaum.
- Colquitt, J.A., Scott, B.A. & LePine, J.A. 2007. Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, 92: 909-927
- Danish, R.Q., Ramzan, S. & Ahmed, F. 2013. Effect of Perceived Organizational Support and Work Environment on Organizational Commitment; Mediating Role of Self-Monitoring. *Advances in Economics and Business*, 1(4):312-317.

<http://www.hrpub.org/download/20131201/AEB2-11801298.pdf> Date of access: 19 Nov. 2016.

Davies, J. 2015. The Relationship Between Perceived Organisational Ethical Climate and Employee Commitment in the Australian Hospitality Industry. Pretoria: University of South Africa.

Davis, B. 2014. University Commitment: Test of a Three-component Model. <http://cornerstone.lib.mnsu.edu/cgi/viewcontent.cgi?article=1341&context=etds> Date of access: 12 Nov. 2016.

De Clercq, D. & Rius, B. I. 2007. Organisational Commitment in Mexican Small and Medium-sized Firms: The Role of Work Status, Organisational Climate and Entrepreneurial Orientation. *Journal of Small Business Management*, 45(4):467-490.

De Clercq, D. R. B. I., 2007. Organisational Commitment in Mexican Small and Medium-sized Firms: The Role of Work Status, Organisational Climate and Entrepreneurial Orientation. *Journal of Small Business Management*, 45(4):467-490.

De Vries, K. & Erumban, A. 2015. Productivity Brief 2015: Global Productivity Growth Stuck in the Slow Lane with No Signs of Recovery in Sight. *The Conference Board: Washington*. <https://www.conference-board.org/retrievefile.cfm?filename=The-Conference-Board-2015-Productivity-Brief.pdf&type=subsite> Date of access: 25 Feb. 2016.

DeConinck, J. 2011. The Effects of Ethical Climate on Organisational Identification, Supervisory Trust and Turnover Among Salespeople. *Journal of Business Research*, 64(6):617-624
<http://www.sciencedirect.com.nwulib.nwu.ac.za/science/article/pii/S01482963100011>
Date of access: 6 Nov. 2016.

DeCotii, T, A. & Summers, T.P. 1987. A Path Analysis of a Model of the Antecedents and Consequences of Organisational Commitment. *Human Relations*, 40(7):445-470.

Demerouti, E., Bakker, A. B. & Leiter, M. 2014. Burnout and Job Performance: The Moderating Role of Selection, Optimization, and Compensation Strategies. *Journal of Occupational Health Psychology*, 19(1):96-107.

Dixit, V. & Bhatia, M. 2012. A Study about Employee Commitment and its Impact on Sustained Productivity in Indian Auto-Component Industry. *European Journal of Business and Social Sciences*, 1(6):34-51.

<http://www.ejbss.com/data/sites/1/septemberissue/ejbss-12-1147-astudyaboutemployeecommitment.pdf> Date of access: 25 Feb. 2016.

Dobre, O. 2013. Employee Motivation and Organisational Performance. *Review of Applied Socio-Economic Research*, 5(1):53

ftp://ftp.repec.org/opt/ReDIF/RePEc/rse/wpaper/R5_5_DobreOvidiulliuta_p53_60.pdf
Date of access: 28 Oct. 2016.

Dolma, S., Azakli, O., Yazar, Y. & Demirbas, T. 2012. Systematic Review of Empirical and Psychometric Studies on Organisational Commitment Conducted in Turkey In McClean, R. ed. (2012). Proceedings of the 11th European Conference on Research Methods, University of Boston, Boston. 28-29 July, 2012.

Donnelly, L. 2014. SA's Economy Depends on Mining Labour Relations, says Manual. *Mail & Guardian*. Feb. 4.

Dordevic, B. 2004. Employee Commitment in Times of Radical Organisational Changes. *Economics and Organisation*, 2(2):111-117.

Eason, S.J. 1991. Why Generalizability Theory Yields Better Results Than Classical Test Theory: A Primer with Concrete Examples. In Thompson B. (ed.), *Advances in Educational Research: Substantive Findings & Methodological Developments*, vol. 1, JAI Press, Greenwich, CT. pp. 83-98.

Eisenberger, R., Fasolo, P. & Davis-LaMastro, V. 1990. Perceived Organizational Support and Employee Diligence, Commitment, and Innovation. *Journal of Applied Psychology*, 75(1):51-59.

Ellis, S.M. & Steyn, H.S. 2003. Practical Significance (Effect Sizes) Versus or in Combination with Statistical Significance (p-values). *Management Dynamics*, 12(4):51-53.

Eustace, A.M.N. 2014. The Role of Leadership in Shaping Organisational Climate: An Example from the FMCG Industry. *SA Journal of Industrial Psychology*, (40)1:1-13 <http://www.scielo.org.za/pdf/sajip/v40n1/03.pdf> Date of access: 20 Sep. 16.

Faloye, D. 2014. Organisational Commitment and Turnover Intentions: Evidence from Nigerian Paramilitary Organisation. *International Journal of Business and Economic Development*, 2(3).
<http://eds.b.ebscohost.com.nwulib.nwu.ac.za/eds/detail/detail?sid=89f63a36-46f4-4b49-8298-8b03fff9e870%40sessionmgr103&vid=0&hid=120&bdata=JnNpdGU9ZWRzLWxpdmU%3d#AN=100271398&db=buh> Date of access: 21 Sep. 2016.

Field, A. 2013. *Discovering Statistics using IBM SPSS Statistics*. London: Sage.

Folkman, J. 2010. Top 9 Leadership Behaviours that Drive Employee Commitment. <http://zengerfolkman.com/wp-content/uploads/2013/05/ZFA-9-Behaviors.pdf> Date of access: 10 Nov. 2016.

Fuller, G. 2016. *The Great Debt Transformation*.
http://link.springer.com/chapter/10.1057/9781137548733_1 Date of access: 20 Oct. 2016.

Gadermann, A.M., Guhn, A.M. & Zumbo, B.D. 2012. Estimating Ordinal Reliability for Likert-type and Ordinal Item Response Data: A Conceptual, Empirical, and Practical Guide. *Practical Assessment, Research & Evaluation*, 17(3):1-13.

Gallant, M. 2012. A Simple Definition of Performance Management. <http://www.halogensoftware.com/blog/a-simple-definition-of-performance-management-and-why-everyone-plays-a-role> Date of access: 6 Nov. 2016.

Gangai, K.N. & Agrawal, R. 2015. Job Satisfaction and Organizational Commitment: Is It important for Employee Performance? http://www.ijmbr.org/pdf_7957_00f359f786fbf60d13a40db3cc4b4497.html Date of access: 19 Nov. 2016.

Gerber, F.J. 2003. Die Invloed van Organisasieklimaat op Werksmotivering. (The Influence of Organisational Climate on work motivation). <http://www.ibrarian.net/navon/page.jsp?paperid=2131777&searchTerm=van+die> Date of access: 15 Sep. 2016.

Ghasemi, B. & Keshavarzi, R. 2014. The Relationship Between Organizational Climate, Organizational Commitment and Organizational Citizenship Behaviour in a Hospital Environment. <http://behaviorsciences.com/wrramt/wp-content/uploads/2014/03/92-Ghasemi.pdf> Date of access: 21 Feb. 2016.

Gillespie N. A. & Mann, L. 2004. Transformational Leadership and Shared Values: The Building Blocks of Trust. *Journal of Managerial Psychology*, 19(6):588 – 607.

Glisson, C. & James, L.R. 2002. The Cross-level Effects of Culture and Climate in Human Service Teams. *Journal of Organisational Behaviour*, 23(6):767-794.

Goh, S. & Low, B.Z. 2014. The Influence of Servant Leadership towards Organizational Commitment: The Mediating Role of Trust in Leaders. *International Journal of Business and Management*, 9(1):17-25.

Govender, K.K. 2016. Employees' Perception of the Organisational Climate: Its Effect on Service Quality. Umtatha: University of Transkei.

Gupta, R.P.M. 2010. Organisational Behaviour. New Delhi: McGraw-Hill.

Hair, J.R., Anderson, R.E., Tatham, R.L. & Black, W.C. 1998. Multivariate Data Analysis. Upper Saddle River, NJ: Prentice-Hall.

Hannevik, M. B. & Lone, J. A. 2014. Organisational Climate in Large-Scale Projects in the Oil and Gas Industry: A Competing Values Perspective. *International Journal of Project Management*, 32(1):687-697 <http://ac.elsa-cdn.com.nwulib.nwu.ac.za/S0263786313001117/1-s2.0-S0263786313001117->

[main.pdf? tid=d991ec50-774d-11e6-bbc1-0000aacb35e&acdnt=1473508872 c7ba1373eaf866036c4b7309b8960797](#) Date of access: 10 Sep. 2016.

Hassen, S.R.J. 2012. Variability in the Organisational Climate of Government Offices and Affective Organisational Commitment. *Public Management Review*, 14(5):563-584.

Hay Group, 2009. Organisational Climate Survey (OCS). <http://www.cluteinstitute.com/ojs/index.php/IBER/article/viewFile/516/503> Date of access: 7 Feb. 2016.

Heathfield, S.M. 2016. Work-Life Balance: Employers Assist Employee Work-Life Balance with Flexible Policies. <https://www.thebalance.com/work-life-balance-1918292> Date of access: 6 Nov. 2016.

Hunton, J.E. & Norman, C.S. 2010. The Impact of Alternative Telework Arrangements on Organizational Commitment: Insights from a longitudinal field experiment. *Journal of Information Systems*, 24(1):67-90.

Iqbal, A. 2008. Organisational Climate and Employees' Commitment: A Study of the Pakistani Knitwear Industry. <https://dialnet.unirioja.es/descarga/articulo/2712272.pdf> Date of access: 15 Sep. 2016

Irving, P.G., Coleman, D.F. & Cooper, C.L. 1997. Further Assessments of a Three Component Model of Occupational Commitment: Generalizability and Differences Across Occupations. *Journal of Applied Psychology*, 82(3):444-452.

Jain, A.K., Giga, S.I. & Cooper, C.L. 2009. Control, Wellbeing, and Commitment. *Leadership and Organisational Development Journal*, 30(3):256-273.

Jaros, S. 2007. Meyer and Allen Model of Organisational Commitment: Measurement Issues. *The Icfai University Press*, 6(4):7-25.

<http://stevejaros.com/wp-content/uploads/2009/08/Jaros-ICFAI-2007-Meyer-and-Allen1.pdf> Date of access: 12 Nov. 2016.

Jaros, S. & Culpepper, R.A. 2014. An Analysis of Meyer and Allan's Continuance Commitment Construct. *Journal of Management and Organisation*, 20(1).
<https://www.cambridge.org/core/journals/journal-of-management-and-organization/article/an-analysis-of-meyer-and-allens-continuance-commitment-construct/F28F3632A22822BC808ABB535CE2B8AB> Date of access: 12 Nov. 2016.

Jena, R.K. 2015. An Assessment of Demographic Factors Affecting Organisational Commitment Among Shift Workers in India.
file:///C:/Users/jacques.louw/Downloads/4_Jena.pdf Date of access: 19 Nov. 2016.

Joshi, A.R.H. 2013. Understanding How Context Shapes Diversity Outcomes.
https://www.researchgate.net/profile/Nicholas_Aramovich/publication/261705225_The_Psychological_Benefits_of_Creating_an_Affirming_Climate_for_Workplace_Diversity/links/5632b89708ae242468d9fee1.pdf. Date of access: 6 Nov. 2016.

Kaplan, M., Ogut, E., Kaplan, A. & Aksay, K. 2012. The Relationship between Job Satisfaction and Organizational Commitment: The Case of Hospital Employees. *World of journal management*, 4(1):22-29.
https://www.academia.edu/5336391/The_Relationship_between_Job_Satisfaction_and_Organizational_Commitment_The_Case_of_Hospital_Employees Date of access: 19 Nov. 2016.

Katavich, K.M. 2013. The Importance of Employee Satisfaction with Performance Appraisals. http://mro.massey.ac.nz/xmlui/bitstream/handle/10179/4708/02_whole.pdf?sequence=1&isAllowed=y Date of access: 6 Nov. 2016.

Kaur, K. & Sandhu, H.S. 2010. Career Stage Effect on Organizational commitment: Empirical Evidence from Indian Banking Industry. *International Journal of Business and Management*, 5(12):141-152.

Kibui, A.W., Gachunga, H. & Namusonge, G.S. 2014. Role of Talent Management on Employees Retention in Kenya: A Survey of State Corporations in Kenya: Empirical Review. *International Journal of Science and Research*, 3(2):414-424.

Kraiger, K., Salas, E., Smith-Jentsch, K.A. & Tannenbaum, S. I. 2012. The Science of Training and Development in Organisations: What Matters in Practice. *Association for Psychological Science*, 13(2):74-101.
<http://psi.sagepub.com/content/13/2/74.full.pdf+html?ijkey=g8tvuLmoeZfN2&keytype=ref&siteid=sppsi> Date of access: 6 Nov. 2016.

Kruger, K. 2012. Productivity in South Africa: Is Reward Management Part of the Problem or Solution. <http://www.sara.co.za/sara/file%20storage/Documents/Con2012a/ProductivityInSA.pdf> Date of access: 8 Aug. 2016.

Kuenzi, M. & Schminke, M. 2009. Assembling Fragments into a Lens: A Review, Critique and Proposed Agenda for the Organisational Work Climate Literature. *Journal of Management*, 35(1):634-717
https://www.researchgate.net/profile/Maribeth_Kuenzi/publication/247570178_Assembling_Fragments_Into_a_Lens_A_Review_Critique_and_Proposed_Research_Agenda_for_the_Organizational_Work_Climate_Literature/links/55d4826108a Date of access: 12 Nov. 2016.

Lee, J. 2004. Company and Union Commitment: Evidence from an Adversarial Industry Relations Climate at a Korean Auto Plant. *International Journal of Human Resource Management*, 15(8):1463-1480.

Lee, K., Rho, E. & Yun, T. 2015. Does Organisational Image Matter? Image, Identification and Employee Behaviours in Public Non-profit Organisations. <http://onlinelibrary.wiley.com/doi/10.1111/puar.12338/abstract> Date of access: 6 Nov. 2016.

Lemmer, S. 2014. The Drilling Industry: A Supplemental Document to the Integrated Report 2013. <http://masterdrilling.com/assets/downloads/the-drilling-services-industry-2013-IR.pdf> Date of access: 12 Nov. 2016.

- Leon, F. 2009. The Limited Engagement: A Study on the Strategic and Identity of the Actions of Resistance and Commitment to Work Reasons. *Journal of Industrial Relations*, 27(2):115-143.
- Levinson, D.J., Darrow, C.N., Klein, E.B., Levinson, M. H., & McKee, B. 1978. *The Season of Man's Life*. New York, NY: Alfred A. Knopf.
- Litwin, G.H. & Stinger, R.A. 1968. *Motivation and Organisational Climate*. Boston (MA): HBS.
- MacNiel, A. J., Prater, D. L. & Busch, S. 2009. The Effects of School Culture and Climate on Student Achievement. *International Journal of Leadership Education*, 12(1):73-84 <http://www.tandfonline.com/doi/full/10.1080/13603120701576241> Date of access: 12 Nov. 2016.
- Mavuso, Z. 2015. Mining Sector Exceeds 10% Female Employment Target but Sexual Harassment, Other Linger. <http://www.miningweekly.com/print-version/occupational-culture-remains-challenge-for-women-in-mining-2015-12-11> Date of access: 19 Nov. 2016.
- Mayring, P. 2000. Qualitative Content Analysis. *Qualitative Social Research*, 1(2). <http://www.qualitative-research.net/index.php/fqs/article/view/1089/2385> Date of access: 11 Nov. 2016.
- McMahon, B. 2007. Organisational Commitment, Relationship Commitment and Their Association with Attachment Style and Locus of Control. https://smartechnology.gatech.edu/bitstream/handle/1853/14502/mcmahon_brian_200705_mast.pdf Date of access: 21 Aug. 2016.
- McShane, S. & Van Glinow, M. 2010. *Organisational Behavior: Emerging Knowledge and Practice for the Real World*. 5th ed. New York, NY: McGraw-Hill.
- Meyer, J.P., Allen, N.J. & Smith, C.A. 1993. Commitment to Organisations and Occupations: Extension and Test of a Three-component Conceptualization. *Journal of Applied Psychology*, 78(4):538-551.

Meyer, J.P., Stanley, D.J., Herscovitch, L. & Topolnytsky, L. 2002. Affective, Continuance and Normative Commitment to the Organisation. A Meta-analysis of Antecedents, Correlates and Consequences. *Journal of Personality and Social Psychology*, 61(1):20-25.

https://smartech.gatech.edu/bitstream/handle/1853/14502/mcmahon_brian_200705_mast.pdf

Mguqulwa, N. 2008. The Relationship Between Organisational Commitment and Work Performance in an Agricultural Company. Pretoria: UNISA.

<http://uir.unisa.ac.za/bitstream/handle/10500/2401/dissertation.pdf?sequence=1>THE

Mitchel, P. & Steen, J. 2015. Productivity in Mining: A Case for Broad Transformation, London: EYGM Ltd.

[http://www.ey.com/Publication/vwLUAssets/EY-Productivity-in-mining/\\$FILE/EY-Productivity-in-mining.pdf](http://www.ey.com/Publication/vwLUAssets/EY-Productivity-in-mining/$FILE/EY-Productivity-in-mining.pdf) Date of access: 25 Feb. 2016.

Mohan, V. & Sharma, D. 2015. Organisational Climate in Relation to Work Motivation and Organisational Commitment. *Voice of Research*, 4(3):38-44.

Moolenaar, N.M. & Slegers, P.J. 2010. Social Networks, Trust, and Innovation. How Social Relationships Support Trust and Innovative Climates in Dutch Schools.

https://scholar.google.co.za/scholar?q=trust+dimension+of+organizational+climate&hl=en&as_sdt=0%2C5&as_vis=1&as_ylo=2009&as_yhi Date of access: 12 Nov. 2016.

Morgan, E.T. & Volkwein, J.F. 1992. The Cultural Approach to the Formation of Organisational Climate. *Human Relations*, 45(1):19-47.

Morin, A.J.S., Morizot, J., Boudrias, J. & Madore, I. 2011. A Multifoci Person-Centered Perspective on Workplace Affective Commitment: A Latent Profile/Factor Mixture Analysis. *Organisational Research Methods*, 14(1):58-90

https://www.researchgate.net/profile/Alexandre_Morin/publication/211391514_A_Multifoci_Person-Centered_Perspective_on_Workplace_Affective_Commitment_A_Latent_ProfileFactor_Mixture_Analysis/links/00b7d5179bd2df1 Date of access: 31 Oct. 2016.

Morrison, R. 2008. Negative Relationship in the Workplace: Associations with Organisational Commitment, Cohesion, Job Satisfaction and Intention to Turnover. *Journal of Management & Organisation*, 14(4):330-344
<http://eds.b.ebscohost.com.nwulib.nwu.ac.za/eds/detail/detail?sid=31f07f03-2ee0-40b6-a8ae-5f6a5afa1785%40sessionmgr103&vid=0&hid=120&bdata=JnNpdGU9ZWRzLWxpdmU%3d#AN=2010-08372-001&db=psych> Date of access: 21 Sep. 2016.

Muijs, D. 2010. *Doing Quantitative Research in Education with SPSS*. London: Sage.

Nehmeh, R. 2009. What is Organizational commitment, why should managers want it in their workforce and is there any cost effective way to secure it?
https://www.smcuniversity.com/working_papers/Ranya_Nehmeh_-_What_is_Organizational_commitment,_why_should_managers_want_it_in_their_workforce_and_is_there_any_cost_effective_way_to_secure_it.pdf

Neill, J. 1994. *Exploratory Factor Analysis of the Short Version of the Adolescent Coping Scale*. Centre for Applied Psychology. Canberra: University of Canberra.

Noah, Y. & Steve, M. 2012. Work Environment and Job Attitude among Employees in a Nigerian Work Organization. *Journal of Sustainable Society*, 1(2):36-43.
<http://arts.ui.edu.ng/sites/default/files/98-217-1-SM.pdf> Date of access: 19 Nov. 2016.

Noordin, F., Omar, S., Sehan, S. & Idrus, S. 2010. Organisational Climate and its Influence on Organisational Commitment. *International Business & Economics Research Journal*, 9(2):1.
<http://www.cluteinstitute.com/ojs/index.php/IBER/article/viewFile/516/503>

Nunnally, J.C. 1978. *Psychometric Theory*. 2nd Ed. New York, NY: McGraw-Hill

Nunnally, J.C. & Bernstein, I.H. 1994. *Psychometric Theory*. 3rd ed. London: McGraw-Hill.

Oswald, A. 2012. The Effect of Working Environment in Workers Performance: The Case of Reproductive and Child Health Care Providers in Tarime District.

http://ihi.eprints.org/1658/1/Asigele_Oswald.pdf Date of access: 10 Nov. 2016.

Pallant, J. 2013. SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS. 6th ed. Maidenhead: McGraw-Hill.

Panayides, P. 2013. Coefficient Alpha: Interpret with Caution. *Europe's Journal of Psychology*, 9(4):687–696.

Patterson, M.G., West, M.A., Shackleton, V.J., Dawson, J.F., Lawthom, R., Maitles, S., Robinson, D.L. & Wallace, A.M. 2005. Validating Organisational Climate Measure: Links to Organisational Practices, Productivity and Innovation. *Journal of Organisational Behaviour*, 26(1):379-408.

Pedhazur, E. & Schmelkin, L. 1991. Measurement, Design and Analysis. Hillsdale, NJ: Erlbaum.

Porter, M., Steers, R., Mowday, R. & Boulian, P. 1974. Organizational Commitment, Job Satisfaction and Turnover Among Psychiatric Technicians. *Journal of Applied Psychology*, 59(1):603-609.

Price, I. 2000. Determining if Skewness and Kurtosis are Significantly Non-normal. Analysing Data: Descriptive statistics. Armidale: School of Psychology, University of New England.

http://webstat.une.edu.au/unit_materials/c4_descriptive_statistics/determine_skew_kurt.html

Price, M. 2013. Convenience Samples: What They Are, and What They Should Be Used For. <https://hrdag.org/2013/04/05/convenience-samples-what-they-are/> Date of access: 10 Nov. 2016.

Puri, P. & Saxena, N. 2014. Organisational Commitment in Relation to Organisational Climate: A Study on Government Employees. *International Journal of Humanities and Social Science Invention*, 2(3):31-37.

- Putter, L. 2010. Organisational Climate and Performance.
<http://repository.tudelft.nl/islandora/object/uuid:76a393e1-2528-46a7-838a-6e770d60b655/?collection=research> Date of access: 12 Nov. 2016.
- Rahimic, Z. 2013. Influence of Organizational Climate on Job Satisfaction in Bosnia and Herzegovina Companies. *International Business Research*, 6(3):123-139.
- Riggo, R.E. 2014. What os Authentic Leadership? Do You Have It?
<https://www.psychologytoday.com/blog/cutting-edge-leadership/201401/what-is-authentic-leadership-do-you-have-it> Date of access: 6 Nov. 2016.
- Saeidipour, B. 2013. A Study on the Effect of Organizational Climate on Organizational Commitment: A Case Study of Educational System. *Management Science Letters*, 3(1):181-194.
- Sarbessa, B. 2014. Organisational Climate and Employees' Organisational Commitment: A Case Study of Commercial Bank of Ethiopia.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2520470 Date of access: 21 Sep. 2016.
- Saunders, M.N.K., Lewis, P. & Thornhill, A. 2016. Research Methods for Business Students. 7th ed. Essex: Pearson Education Ltd.
- Schneider, B. & Barbera, K. M. 2014. The Oxford Handbook of Organisational Climate and Culture. Oxford: Oxford University.
- Schneider, B. & Reichers, A.E. 1983. On the Ethology of Climates. *Personnel Psychology*, 36(1):19-39.
- Schneider, B., Ehrhart, M.G. & Macey, W.H. 2013. Organisational Climate and Culture. *Annual Review of Psychology*, 64(1):361-388.
bschneider@executiveboard.com, mehrhart@mail.sdsu.edu
wmacey@executiveboard.com Date of access: 21 Oct. 2016.

Schwikkard, G. 2016. Declining Productivity in South African Mining: How Bad is It? <http://www.dbassociates.consulting/single-post/2016/1/14/Declining-productivity-in-South-African-Mining-%E2%80%93-how-bad-is-it> Date of access: 25 Oct. 2016.

Shaughnessy, J., Zechmeister, E. & Jeanne, Z. 2011. Research Methods in Psychology. 9 ed. New York, NY: McGraw Hill.

Skwarek, S. 2016. Authentic Leadership Climate. [http://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/4564/\\$FILE/dis4564.pdf](http://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/4564/$FILE/dis4564.pdf) Date of access: 6 Nov. 2016.

Soliz, E. R. R., Monroy, V. I. B. & Orozco-Gomez, M. 2014. The Inner Circle: How Politics Affects the Organisational Climate. *Journal of Organisational Culture, Communications & Conflict*, 18(1):65-88. <http://www.alliedacademies.org/articles/jocccvol18no12014.pdf#page=73> Date of access: 31 Aug. 2016.

Soltani, H. & Tabli, H. 2014. The Role of Job Commitment and Job Satisfaction in the Job Performance Using Kano and Fuzzy MCDM Models. *WALIA Journal*, 30(3):52-58 <http://waliaj.com/wp-content/2014/Special%20Issue%203,%202014/09%202014-30-S3-pp.52-58.pdf> Date of access: 6 Nov. 2016.

Spence Laschinger, H.K., Leiter, M.P., Day, A., Gilin-Oore, D. & Mackinnon, S.P. 2012. Building Empowering Work Environments That Foster Civility and Organizational Trust: Testing an Intervention. *Nursing Research September/October*, 61(5):316–325.

SPSS Inc. Released 2008. SPSS Statistics for Windows, Version 17.0. Chicago: SPSS Inc.

Steers, R.M. 1977. Organisational Effectiveness: A Behavioural View. Santa Monica, CA: Goodyear.

Steyn, H.S. (Jr.). 2009. Manual for the Determination of Effect Size Indices and Practical Significance. <http://www.puk.ac.za/fakulteite/natuur/skd/indeling.html> Date of access: 19 Nov. 2016.

Suma, S. & Lesha, J. 2013. Job Satisfaction and Organisational Commitment: The Case of Shkodra Municipality. <http://eujournal.org/index.php/esj/article/viewFile/1156/1172> Date of access: 19 Nov. 2016.

Super, D. 1957. *The Psychology of Careers*. New York, NY: Harper.

Tavakol, M. & Dennick, R. 2011. Making Sense of Cronbach's alpha. *International journal of medical education*, 2:53-55.

Tricklebank, G. 2010. Culture vs Climate in the Organisation. <http://www.deltapartners.ca/blog/culture-vs-climate-in-the-organization> Date of access: 29 Oct. 2016.

Van Dyk, J. 2011. The Relationship Between Organisational Commitment, Retention Factors and Perceived Job Embeddedness. http://uir.unisa.ac.za/bitstream/handle/10500/5731/thesis_van%20dyk_j.pdf?sequence=1 Date of access: 19 Nov. 2016.

Verwey, S. 2010. Methodological Implications of a Systems Approach to Organisational Climate. *Communicare*, 9(1):21-42.

Wallace, E., de Chernatony, L. & Buil, I. 2013. Building Bank Brands: How Leadership Behaviour Influences Employee Commitment. *Journal of Business Research*, 66(2):165-171.

Warsi, S., Fatima, N. & Sahibzada, A. 2009. Study on Relationship Between Organizational Commitment and its Determinants among Private Sector Employees of Pakistan. *International Review of Business Research Papers*, 5(3):399-410. <https://bizresearchpapers.com/29.Sund.pdf> Date of access: 19 Nov. 2016.

Welman, C., Kruger, F. & Mitchell, B. 2005. Research Methodology. 3rd ed. Cape Town: Oxford University Southern Africa.

Wiley, J.W. & Brooks, S.M. 2000. The High-Performance Organisational Climate. Thousand Oaks, California: Sage. p177-191

Williams, Y. 2015. Study.com. <http://study.com/academy/lesson/central-tendency-measures-definition-examples.html> Date of access: 30 Mar. 2016.

Yu, C.H. 2001. An Introduction to Computing and Interpreting Cronbach Coefficient Alpha in SAS. Arizona State University, Tempe, AZ SUGI 26 Proceedings; April 22-25, 2001. Long Beach California. www.sas.com/proceedings/sugi26/p246-26.pdf

APPENDICES

Appendix A: TCM Questionnaire

TCM Employee Commitment Survey

Academic Users Guide 2004

John P. Meyer and Natalie J. Allen

Department of Psychology

The University of Western Ontario

© 2004, University of Western Ontario.

All rights reserved. No part of this publication may be reproduced or transmitted in any form by any means, including under license from a Reproduction Rights Organization, without the express written permission of the University of Western Ontario.

Academic Users Guide

Based on the Three-Component Model (TCM) of commitment (Meyer & Allen, 1991; 1997), the *TCM Employee Commitment Survey* measures three forms of employee commitment to an organization: desire-based (affective commitment), obligation-based (normative commitment) and cost-based (continuance commitment). The survey includes three well-validated scales, the Affective Commitment Scale (ACS), the Normative Commitment Scale (NCS) and the Continuance Commitment Scale (CCS).

Each is scored separately and can be used to identify the “commitment profile” of employees within an organization.

This academic version of the TCM Employee Commitment Survey was prepared for those who intend to use the commitment scales for academic research purposes.

Original and revised versions of the scales are provided in Appendix A. This guide provides background information on the development of the commitment scales and addresses general issues pertaining to their use. Appendix B provides a list of references that you can consult for more information.

Why is commitment important?

Commitment implies an intention to persist in a course of action. Therefore, organizations often try to foster commitment in their employees to achieve stability and reduce costly turnover. It is commonly believed that committed employees will also work harder and be more likely to “go the extra mile” to achieve organizational objectives. Research has consistently demonstrated that commitment does indeed contribute to a reduction in turnover (see Tett & Meyer, 1993; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). But, there is a caveat to the assumption regarding its impact on performance.

Research conducted to test the three-component model of commitment has demonstrated that commitment can be characterized by different mindsets – desire, obligation, and cost (see Meyer & Allen, 1991, 1997). Employees with a strong affective commitment (high ACS scores) stay because they *want to*, those with strong normative commitment (high NCS scores) stay because they feel they *ought to*, and those with strong continuance commitment (high CCS scores) stay because they *have to* do so. Research consistently shows that employees who want to stay (high ACS) tend to perform at a higher level than those who do not (low ACS). Employees who remain out of obligation (high NCS) also tend to out-perform those who feel no such obligation (low NCS), but the effect on performance is not as strong as that observed for desire. Finally, employees who have to stay primarily to avoid losing something of value (e.g., 3 benefits, seniority) often have little incentive to do anything more than is

required to retain their positions. So, not all commitments are alike (for summaries of the empirical evidence, see Allen & Meyer, 1996, 2000; Meyer et al., 2002).

How do I use the Commitment Survey?

There are two versions of the TCM Employee Commitment Survey – original and revised (see below). Both include statements (items) pertaining to employees' perception of their relationship with the organization and their reasons for staying. After reading each item, employees indicate the strength of their agreement by selecting a number from 1 (strongly disagree) to 7 (strongly agree). In the original version of the survey, there are eight items for each of the three commitment scales: ACS, NCS, and CCS. In the revised survey there are six statements for each scale. (Note: A new version of the CCS has recently been developed based on accumulating evidence that the original scale reflects two underlying dimensions, personal sacrifice and lack of alternatives (see Allen & Meyer, 1996) and that the personal sacrifice dimension corresponds more closely to the continuance commitment construct as it was originally conceived (see Allen & Meyer, 1996; McGee & Ford, 1987; Meyer et al., 2002). For more information on the new version of the CCS, its development and psychometric properties, see Powell and Meyer, 2004.

For both the original and revised versions of the survey, the items in Appendix A are grouped according to scale: ACS, NCS, and CCS. For purposes of survey administration, we recommend that the items from the three scales be mixed. For scoring purposes, employees' responses to all of the items *within* a scale are averaged to yield an overall score for each of the three components of commitment (see below for more detail). Although it is also possible to sum the item scores rather than averaging, this can create some problems if employees fail to respond to some items. The existence of *missing data* will have a much greater impact on total scores than on average scores. Of course, if employees fail to respond to a large number of the items (e.g., more than two or three per scale), their scores will be suspect and probably should not be interpreted. (Note: The existence of missing data can be problematic for the analysis and interpretation of any employee survey. There are several different ways to address this problem. For a more detailed discussion of this issue and the options available, see McDonald, Thurston and Nelson (2000) and Roth, Switzer and Switzer (1999)).

Note that some of the items in the commitment scales have been worded such that strong agreement actually reflects a lower level of commitment. These are referred to as "reverse-keyed" items (identified by "R" after the statement) and are included to encourage respondents to think about each statement carefully rather than mindlessly adapting a pattern of agreeing or disagreeing with the statements. For the same reason, we typically recommend that items from the three commitment scales be integrated for purposes of presentation in a paper or web-based survey. For scoring purposes, however, it is important that (a) scores on reverse-keyed statements be recoded (i.e., 1 = 7, 2 = 6, ... 7 = 1) before scoring, and (b) averages are computed based only on items relevant to the specific scale. Scores computed by combining items from the different commitment scales will *not* be meaningful. If scored correctly, you should obtain three scores, one each for the ACS, NCS, and CCS, for each respondent. These scores should range in value from 1 to 7 with higher scores indicating stronger commitment.

Which version of the survey should I use?

The original version of the ACS, NCS and CCS each include eight items. The revised scales include six items. The two versions of the ACS and CCS are very similar – the choice between the two might best be made on the basis of desired length. The greatest difference between the original and revised versions will be seen in the NCS. Briefly, the NCS measures employees' feeling of obligation to remain with the organization. Theoretically, this obligation can arise from two primary sources: socialization

experiences and receipt of “benefits” from the organization that require reciprocation on the part of the employee. Items in the original version of the NCS tend to include information about the basis for the obligation, whereas those in the revised version focus more specifically on the feeling of obligation without specifying the basis.

The choice between these two versions might best be made on the basis of whether information about the basis for feeling of obligation is relevant. A note of caution is in order here, however. Making inferences about the basis for normative commitment from the original version of the scale might require interpretation of responses to one or a subset of the items. The NCS was not developed for this purpose and scores on single items can be unreliable.

How should I analyse my data?

As noted above, once you have administered and scored the TCM Employee Commitment Survey, you should have three scores for each respondent. For best results, the commitment survey should be completed anonymously. The content of the scales can be quite sensitive and, under some circumstances, employees might be reluctant to respond honestly if they believe that they can be identified. Therefore, if administered anonymously, interpretation is based on an assessment of the average score and the level of dispersion around this average. This can be done at an organizational level, or at a department or unit level (assuming sufficient numbers). How these commitment scores are used for research purposes obviously depends on the nature of the research questions being asked. The most common data analytic approach has been to use correlation or regression to examine relations between the commitment scores and scores on other variables presumed to be their antecedents, correlates or consequences. Other strategies involve the use of ANOVA to compare commitment levels across groups. Appendix B provides a list of references where you can find examples of studies pertaining to the development and consequences of commitment as well as narrative and meta-analytic reviews of existing research. In the remainder of this section we focus on approaches you might take to examine the behavioural consequences of employee commitment.

Although the vast majority of studies using the TCM employee commitment measures have examined the independent or additive effects of the three components on outcomes of interest (e.g., turnover intention, turnover, attendance, job performance, organizational citizenship behaviour), in the original formulation of the theory, Meyer and Allen (1991) proposed the three components of commitment might interact to influence behaviour (see Meyer & Herscovitch, 2001, for a set of propositions concerning the nature of the interaction effects). If so, the nature of the relation between any single component of commitment and an outcome of interest might vary depending on the strength of the other components. Only a handful of studies to date have tested for interaction effects (e.g., Chen & Francesco, 2003; Jaros, 1997; Meyer, Paunonen, Gellatly, Goffin & Jackson, 1989; Randall, Fedor, & Longenecker, 1990; Somers, 1995). Most have found evidence for interactions. This suggests that interpretation of zero-order correlations might be somewhat misleading. Therefore, we recommend that researchers interested in examining relations between the commitment component and various “outcome” measures consider testing for interactions using moderated multiple regression analyses (for more information on this analytic strategy, see Aiken and West, 1991).

Another approach to examining the joint effects of the commitment components on behaviour is to conduct commitment profile comparisons (see Meyer & Herscovitch, 2001, for propositions concerning behaviour differences across profile groups, and Herscovitch & Meyer, 2002, for an empirical example). Plotting the three commitment scores will yield a commitment profile for the organization, department, or unit. In theory (Meyer & Allen, 1991; Meyer & Herscovitch, 2001) the optimal profile should be one in which ACS scores are high (e.g., above the scale midpoint), and the CCS is considerably lower (e.g., below the scale midpoint). Profiles in which the CCS scores are elevated

suggest that many employees may feel “trapped” in the organization. Although this can contribute to a relatively low rate of turnover, our research suggests that such employees will do little beyond that which is required of them. To date, only a few studies have been conducted to make profile comparisons (e.g., Gellatly, Meyer & Luchak, 2004; Herscovitch & Meyer, 2002). Preliminary evidence is generally consistent with prediction, but more research is needed before firm conclusions can be drawn.

Can I alter the scales to suit my purposes?

It is possible to alter the scales without having a major impact on reliability and validity. The strength of the impact, however, will depend on the nature and extent of the revision. The most common revisions, and their potential effects, are described briefly below. Of course, we can only speculate on what the impact will be in any given situation. The evidence for reliability and validity accumulated through years of research (see Allen & Meyer, 1996, 2000) is based largely on the use of the scales in unaltered form. Therefore, we cannot guarantee that the findings will apply when the scales are modified.

Number of Items.

One common modification is to reduce the number of items on each of the three scales, typically as a way of reducing overall survey length. Our experience has been that the scales can be reduced in length to as few as three or four items each without a major impact on reliability. If scale length is an issue, it might be wise to conduct a pilot investigation to assess reliability before conducting the full-scale study. Of course, reliability is only one factor that can affect validity, so even if it can be demonstrated that the reliabilities of shortened scales are acceptable, there is no guarantee that the validity will not be affected. For more information on strategies for scale reduction, see Stanton, Sinar, Balzer, & Smith (2002).

Response Scale.

Another common modification is to alter the response scale. Typically, a 7-point disagree-agree scale has been used but, in our experience, a 5-point scale also works quite well. Reducing the number of response options below five is not advised. Obviously, it is important that researchers not directly compare scale scores that are based on different item response scales.

Customizing the Items for the Participating Organization.

The items in the TCM Employee Commitment Survey refer to “the organization.” In cases where there may be some confusion about what the organization is, as for example when respondents work for a large subsidiary of an even larger organization, it may be advisable to substitute the relevant organization’s name in the item. In cases where respondents’ organizational affiliations may not be known in advance (e.g., when you collect data through a professional association), it is advisable to modify the instructions to inform respondents as to how you would like them to interpret the term “organization” for purposes of the survey.

Combining Measures.

Users who want to measure attitudes other than commitment to the organization might consider mixing statements from the commitment scales with statements from other measures (e.g., job satisfaction). This is certainly possible as long as a common response scale is used. Doing so, however,

could create problems. On the one hand, mixing the commitment scales with measures with a very different focus (e.g., attitudes toward supervisors, co-workers, compensation systems) can cause confusion for respondents – imagine carrying on a conversation where all of this was being discussed at once. On the other hand, mixing content can lead to artificial inflation of the relationship between scores on the measures. In situations where the other measures are included to help identify factors or conditions in the workplace that might contribute to employees' commitment, or lack of commitment, the inflation of relationships could lead to erroneous conclusions. In light of these potential problems, it is usually advisable to include the commitment measures in a separate section of a more comprehensive attitude survey. A decision to do otherwise should be made with caution. For more information on item context effects, see Schwarz (1999).

Reversing the negatively keyed items.

The use of negatively keyed items in attitude surveys is intended to control for acquiescence response bias (i.e., the tendency to respond affirmatively to items regardless of their content). While acquiescence response bias can be a problem, there is some evidence that using reverse-keyed items can create confusion for some respondents. An investigation using the TCM commitment scales indeed found evidence for a small “keying factor” resulting from the use of reverse keyed items (see Magazine, Williams, & Williams, 1996). Therefore, some users prefer to reword the reverse-keyed items to minimize potential confusion. There has yet to be a systematic investigation of the impact of doing so, but we believe that it will be minimal. Therefore, we suggest that the reverse-keyed items be reworded if there is any reason to be concerned that reverse-keyed items might be a problem for the respondent sample.

Adapting the scales to measure commitment to other foci.

Researchers sometimes want to measure commitment to foci other than the organization itself (e.g., occupation, supervisor, work team, customers) and inquire as to whether it is appropriate to simply replace “organization” in the commitment items with a descriptor of the relevant target. We agree with the importance of acknowledging the multi-dimensionality of all workplace commitments but do not advocate this simple target substitution approach. The terms of a commitment can be very different depending on the target. For example, staying might be a relevant behavioral outcome of commitment to an organization or occupation, but is less relevant when the target is a supervisor or customer, and not at all relevant with the target of the commitment is a goal or change initiative. Meyer and Herscovitch (2001) recently explained how our three-component model of commitment can be adapted for the study of other workplace commitments. They also describe a strategy for developing measures of the three components of these commitments. For examples of research that has applied the three component model to other foci, see Becker and Kernan (2003), Bentein, Stinglhamber, and Vandenberghe (2002), Clugston, Howell, and Dorfman (2000), Herscovitch and Meyer (2002), Meyer et al. (1993), Stinglhamber, Bentein, and Vandenberghe (2002), and Vandenberghe, Stinglhamber, Bentein, and Delhaise (2001).

Translation.

Some users might want to administer the commitment scales in languages other than English, either within a largely English-speaking culture, or in a non-English-speaking country or culture. We do not yet have a standard set of translated scales. However, others have translated the scales for research purposes, with varying degrees of success. There are many factors to consider in translating and using measures in countries or cultures other those where they were originally developed and validated.

Below, we provide sources where you can go to get more information about the potential impact of translation and the cross-cultural validity of the three-component model of commitment. For more detailed information about translation and transporting measures to other cultures, see Hulin (1987) and Hui and Triandis (1985).

APPENDIX A

Commitment Scales

Instructions

Listed below is a series of statements that represent feelings that individuals might have about the company or organization for which they work. With respect to your own feelings about the particular organization for which you are now working, please indicate the degree of your agreement or disagreement with each statement by circling a number from 1 to 7 using the scale below.

1 = strongly disagree

2 = disagree

3 = slightly disagree

4 = undecided

5 = slightly agree

6 = agree

7 = strongly agree

Original Version (Allen & Meyer, 1990)

Affective Commitment Scale

- 1) I would be very happy to spend the rest of my career with this organization.
- 2) I enjoy discussing my organization with people outside it.
- 3) I really feel as if this organization's problems are my own.
- 4) I think that I could easily become as attached to another organization as I am to this one. (R)
- 5) I do not feel like 'part of the family' at my organization. (R)
- 6) I do not feel 'emotionally attached' to this organization. (R)
- 7) This organization has a great deal of personal meaning for me.
- 8) I do not feel a strong sense of belonging to my organization. (R)

Continuance Commitment Scale

- 1) I am not afraid of what might happen if I quit my job without having another one lined up. (R)
- 2) It would be very hard for me to leave my organization right now, even if I wanted to.
- 3) Too much in my life would be disrupted if I decided I wanted to leave my organization now.
- 4) It wouldn't be too costly for me to leave my organization now. (R)
- 5) Right now, staying with my organization is a matter of necessity as much as desire.
- 6) I feel that I have too few options to consider leaving this organization.

7) One of the few serious consequences of leaving this organization would be the scarcity of available alternatives.

8) One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice -another organization may not match the overall benefits I have here.

Normative Commitment Scale

1) I think that people these days move from company to company too often.

2) I do not believe that a person must always be loyal to his or her organization. (R)

3) Jumping from organization to organization does not seem at all unethical to me. (R)

4) One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.

5) If I got another offer for a better job elsewhere I would not feel it was right to leave my organization.

6) I was taught to believe in the value of remaining loyal to one's organization.

7) Things were better in the days when people stayed with one organization for most of their careers.

8) I do not think that wanting to be a 'company man' or 'company woman' is sensible anymore. (R)

Revised Version (Meyer, Allen, & Smith, 1993)

Affective Commitment Scale

1) I would be very happy to spend the rest of my career with this organization.

2) I really feel as if this organization's problems are my own.

3) I do not feel a strong sense of "belonging" to my organization. (R)

4) I do not feel "emotionally attached" to this organization. (R)

5) I do not feel like "part of the family" at my organization. (R)

6) This organization has a great deal of personal meaning for me.

Continuance Commitment Scale

1) Right now, staying with my organization is a matter of necessity as much as desire.

- 2) It would be very hard for me to leave my organization right now, even if I wanted to.
- 3) Too much of my life would be disrupted if I decided I wanted to leave my organization now.
- 4) I feel that I have too few options to consider leaving this organization.
- 5) If I had not already put so much of myself into this organization, I might consider working elsewhere.
- 6) One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.

Normative Commitment Scale

- 1) I do not feel any obligation to remain with my current employer. (R)
- 2) Even if it were to my advantage, I do not feel it would be right to leave my organization now.
- 3) I would feel guilty if I left my organization now.
- 4) This organization deserves my loyalty.
- 5) I would not leave my organization right now because I have a sense of obligation to the people in it.
- 6) I owe a great deal to my organization.

Note. (R) indicates a reverse-keyed item. Scores on these items should be reflected (i.e., 1 = 7, 2 = 6, 3 = 5, 4 = 4, 5 = 3, 6 = 2, 7 = 1) before computing scale scores.

Appendix B: Permission to use Organisational Climate Questionnaire

Permission to use survey - Message (HTML)

File Message Tell me what you want to do

Ignore Delete Reply Reply Forward Meeting OneNote Mark Unread Tags Categorize Follow Translate Find Related Zoom

Junk All More

Respond

Move Actions

Editing Select

Zoom

Sun 2016/08/07 10:42 AM

Jacques Louw

Permission to use survey

To: 'orgda@sifca.com', 'nicelen@sifca.com'

This message was sent with High importance.

Good day

I would like permission to use your organisational climate questionnaire for my dissertation as part of my MBA at North West University.

http://uir.unisa.ac.za/bitstream/handle/10500/2611/dissertation_castro_m.pdf?sequence=1

Kind Regards,

Jacques Louw

Disclaimer: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, copied, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

Appendix C: Original Organisational Climate Questionnaire

Organisational Climate Questionnaire

Compiled by:

Dr Nico Martins Organisational Diagnostics
P O Box 1550
Glenvista
2058
Tel: 011 432 2006
Fax: 011 432 4768
E-mail: nicellen@iafrica.com
Web Page: www.orgdia.co.za

INSTRUCTIONS

Thank you for participating in the survey. The questionnaire consists of 70 questions. It takes approximately 20 to 30 minutes on average to complete it.

Please note that this survey is handled completely **confidentially**. Please complete the survey in one session (cannot be book marked or saved and returned to later).

Steps to follow to complete and submit the survey:

STEP 1:

In **section 1** we require biographical information. Read each statement and tick (☐) the appropriate box.

In **section 2** decide whether you agree or disagree with each statement and tick (☐) the appropriate box as per the scale below.

The scale refers to the following:

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

PLEASE tick (☐) the appropriate box.

PLEASE try to avoid answering the column marked “unsure” on too many occasions, as this tends to skew the results.

EXAMPLE:

Question 1: My manager is always friendly.

If you strongly agree with this statement, tick the box below “strongly agree”.

Strongly disagree	Disagree	Unsure	Agree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5

2. My immediate manager trusts me.	?	?	?	?	?
	1	2	3	4	5
3. I believe what my immediate manager says.	?	?	?	?	?
	1	2	3	4	5
4. Management delivers what they promise.	?	?	?	?	?
	1	2	3	4	5
5. Management is transparent.	?	?	?	?	?
	1	2	3	4	5

Strongly disagree Disagree Unsure Agree Strongly agree

TRAINING AND DEVELOPMENT

6. I receive the training I need to do my job.	?	?	?	?	?
	1	2	3	4	5
7. I am satisfied with the opportunities for career development.	?	?	?	?	?
	1	2	3	4	5
8. New employees receive the necessary induction/orientation.	?	?	?	?	?
	1	2	3	4	5
9. A personal development plan based on my training and development needs exists.	?	?	?	?	?
	1	2	3	4	5
10. I am provided with opportunities for learning and development based on my personal development plan.	?	?	?	?	?
	1	2	3	4	5

11. I am aware of the mentoring/coaching opportunities in the organisation.	?	?	?	?	?
	1	2	3	4	5

12. The promotion criteria for jobs are available.	?	?	?	?	?
	1	2	3	4	5

Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--------------------------	-----------------	---------------	--------------	-----------------------

TRANSFORMATION AND DIVERSITY

13. My immediate manager treats employees equally.	?	?	?	?	?
	1	2	3	4	5

14. My immediate manager manages a diverse team well.	?	?	?	?	?
	1	2	3	4	5

15. My immediate manager treats employees consistently (in the same way) irrespective of who you are.	?	?	?	?	?
	1	2	3	4	5

16. I understand the transformation strategy of the organisation.	?	?	?	?	?
	1	2	3	4	5

17. I think there are enough initiatives to drive diversity in the organisation.	?	?	?	?	?
	1	2	3	4	5

18. I see how transformation in the	?	?	?	?	?
	1	2	3	4	5

organisation is going to improve our business.

19. I support the organisation's transformation initiatives.	☐	☐	☐	☐	☐
	1	2	3	4	5

20. My immediate manager is committed to transformation in the organisation.	☐	☐	☐	☐	☐
	1	2	3	4	5

21. I agree with the way transformation is being implemented in the organisation.	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--	--------------------------	-----------------	---------------	--------------	-----------------------

JOB SATISFACTION

22. I feel positive about my future in the organisation.	☐	☐	☐	☐	☐
	1	2	3	4	5

23. I find my work interesting	☐	☐	☐	☐	☐
	1	2	3	4	5

24. I find my work challenging.	☐	☐	☐	☐	☐
	1	2	3	4	5

25. I feel the organisation really cares for its employees.	☐	☐	☐	☐	☐
	1	2	3	4	5

26. The organisation retains its best employees.	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
LEADERSHIP					
27. My immediate manager values the contribution I make.	1	2	3	4	5
28. My immediate manager keeps confidential issues to himself/herself.	1	2	3	4	5
29. My immediate manager does a good job at “people management”, dealing with people who work for him/her.	1	2	3	4	5
30. My immediate manager leads by example.	1	2	3	4	5
31. I get along well with my immediate manager.	1	2	3	4	5
32. The management style of my immediate manager is generally participative.	1	2	3	4	5
33. My immediate manager demonstrates strong leadership skills.	1	2	3	4	5
34. The management style of my immediate manager is generally autocratic.	1	2	3	4	5
35. My immediate manager manages client (internal or external) relationships well.	1	2	3	4	5

36. My immediate manager is knowledgeable in his/her area of specialisation.	☐	☐	☐	☐	☐
	1	2	3	4	5

37. My immediate manager respects me as an employee.	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--	--------------------------	-----------------	---------------	--------------	-----------------------

EMPLOYEE WELLNESS

38. My immediate manager supports employees' efforts to balance work, family and personal responsibilities.	☐	☐	☐	☐	☐
	1	2	3	4	5

39. I am able to satisfy both my job and family responsibilities.	☐	☐	☐	☐	☐
	1	2	3	4	5

40. The amount of work I am asked to do is reasonable.	☐	☐	☐	☐	☐
	1	2	3	4	5

41. The pace of work enables me to do a good job.	☐	☐	☐	☐	☐
	1	2	3	4	5

42. My job does not cause unreasonable amounts of stress in my life.	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--	--------------------------	-----------------	---------------	--------------	-----------------------

COMMUNICATION

43. Changes are well communicated to those most directly affected.	☐	☐	☐	☐	☐
	1	2	3	4	5

44. My immediate manager listens carefully to his/her staff.	☐	☐	☐	☐	☐
	1	2	3	4	5

45. My immediate manager clarifies misunderstandings if needed.	☐	☐	☐	☐	☐
	1	2	3	4	5

46. My immediate manager conducts staff meetings in an effective manner.	☐	☐	☐	☐	☐
	1	2	3	4	5

47. The organisation's future plans (strategy) have been clearly communicated to me.	☐	☐	☐	☐	☐
	1	2	3	4	5

48. I am informed of changes before they actually happen.	☐	☐	☐	☐	☐
	1	2	3	4	5

49. My immediate manager does a good job of sharing information.	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--	--------------------------	-----------------	---------------	--------------	-----------------------

PERFORMANCE MANAGEMENT

50. I receive regular feedback regarding my work performance from my immediate manager.	☐	☐	☐	☐	☐
	1	2	3	4	5

51. I receive the information I need to do my job properly.	☐	☐	☐	☐	☐
	1	2	3	4	5

52. My job responsibilities, objectives and targets, are clear to me.	☐	☐	☐	☐	☐
	1	2	3	4	5

53. I am satisfied with the way that my work performance is evaluated.	☐	☐	☐	☐	☐
	1	2	3	4	5

54. I am satisfied with the recognition for good performance.	☐	☐	☐	☐	☐
	1	2	3	4	5

55. My salary package is fair in comparison with similar positions in the organisation.	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--	--------------------------	-----------------	---------------	--------------	-----------------------

TEAMWORK

56. The people I work with are pleasant.	☐	☐	☐	☐	☐
	1	2	3	4	5

57. I feel needed in my team.	☐	☐	☐	☐	☐
	1	2	3	4	5

58. I feel part of my team.	☐	☐	☐	☐	☐
	1	2	3	4	5

59. In my section we work together as a team.	☐	☐	☐	☐	☐
	1	2	3	4	5

60. My immediate manager participates in team activities.	☐	☐	☐	☐	☐
	1	2	3	4	5

61. Members of my team are appropriately involved when we have to make a decision.	☐	☐	☐	☐	☐
	1	2	3	4	5

62. Regular team building opportunities are arranged for our section.	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--	--------------------------	-----------------	---------------	--------------	-----------------------

WORK ENVIRONMENT

63. I am satisfied with the quality of equipment (computers, software, IT systems), which I use in my work.	☐	☐	☐	☐	☐
	1	2	3	4	5

64. They physical set-up at work allows me to do my best (furniture, lighting, air conditioning, etc).	☐	☐	☐	☐	☐
	1	2	3	4	5

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
--	--------------------------	-----------------	---------------	--------------	-----------------------

BCX IMAGE

65. The organisation's brand is well known in the market place.	☐	☐	☐	☐	☐
	1	2	3	4	5

66. I think the organisation's brand is highly rated.	☐	☐	☐	☐	☐
	1	2	3	4	5

67. I am proud to be associated with the organisation brand.	☐	☐	☐	☐	☐
	1	2	3	4	5

68. The organisation is regarded as an employer of choice.	☐	☐	☐	☐	☐
	1	2	3	4	5

Appendix D: Research Questionnaire

QUESTIONNAIRE

INSTRUCTIONS

Thank you for participating in the survey. This study is performed as part of the completion of an MBA qualification. It takes approximately 20 minutes on average to complete it and please take note that this survey is handled completely **confidentially**. Please complete the survey in one session (cannot be book marked or saved and returned to later). Note that results can be made available.

Steps to follow to complete and submit the survey:

In **section 1** we require biographical information. Read each statement and tick (☐) the appropriate box.

In **section 2 ANB section 3** decide whether you agree or disagree with each statement and tick (☐) the

Ethical number: EMSPBS16/02/16-01/32

SECTION 1

Read each statement and tick (✓) the appropriate box.

1. What is your **age**?

18 to 29 years	30 to 39 years	40 to 50 years	51 years and older
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

2. What is your **gender**?

M	F
<input type="checkbox"/> 1	<input type="checkbox"/> 2

3. What is your **language**?

Afrikaans	English	IsiZulu	Setswana	Other
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

4. **Years of service** at organisation?

0 to 1 year	2 to 5 years	6 to 10 years	Longer than 10 years
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

5. **Education Level**

Grade 12	Diploma	Degree	Post Degree
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

6. What is your **job level** as per the organisation's title matrix?

Top Management	<input type="checkbox"/> 1
Middle Management	<input type="checkbox"/> 2
Lower Management	<input type="checkbox"/> 3
Support Staff	<input type="checkbox"/> 4
Helper/Assistant	<input type="checkbox"/> 5
Operator	<input type="checkbox"/> 6
Other	<input type="checkbox"/> 7

(If "Other", please specify: _____)

7. At which **legal entity** are you employed?

Master Drilling Shared Services	<input type="checkbox"/> 1
Master Drilling South Africa	<input type="checkbox"/> 2
Master Drilling Exploration	<input type="checkbox"/> 3
Drilling Technical Services	<input type="checkbox"/> 4
Other	<input type="checkbox"/> 5
	<input type="checkbox"/> 6

(If "Other", please specify: _____)

8. In which **department** are you employed?

Finance	<input type="checkbox"/> 1
Engineering	<input type="checkbox"/> 2
Procurement	<input type="checkbox"/> 3
Logistics	<input type="checkbox"/> 4
Production	<input type="checkbox"/> 5

Workshop	<input type="checkbox"/> 6
Administration – General	<input type="checkbox"/> 7

(If “Other”, please specify: _____)

9. What is your geographical location?

Fochville Area	<input type="checkbox"/> 1
Site – Production	<input type="checkbox"/> 2
Other	<input type="checkbox"/> 3

(If “Other”, please specify: _____)

SECTION 2

Read each statement and tick (✓) the appropriate box.

EXAMPLE:

Question 1: My manager is always friendly.

If you strongly agree with this statement, tick the box below “strongly agree”.

Strongly disagree	Disagree	Unsure	Agree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1 They physical set-up at work allows me to do my best (furniture, lighting, air conditioning, etc)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2 I am satisfied with the way that my work performance is evaluated	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3 I find my work interesting	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4 I am able to satisfy both my job and family responsibilities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5 A personal development plan based on my training and development needs exists	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6 I trust my immediate manager	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7 I am proud to be associated with the organisation brand	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8 I agree with the way transformation is being implemented in the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9 I receive the information I need to do my job properly	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
10 The organisation’s brand is well known in the market place	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
11 My immediate manager trusts me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
12 My immediate manager does a good job of sharing information	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
13 My immediate manager keeps confidential issues to himself/herself	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
14 I am aware of the mentoring/coaching opportunities in the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
15 In my section we work together as a team	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
16	My immediate manager treats employees equally	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
17	I am provided with opportunities for learning and development based on my personal development plan	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
18	I feel needed in my team	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
19	I regard the organisation as an employer of choice	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
20	Management is transparent	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
21	My immediate manager supports employees' efforts to balance work, family and personal responsibilities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
22	I think the organisation's brand is highly rated	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
23	My immediate manager is committed to transformation in the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24	I believe what my immediate manager says	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
25	My immediate manager listens carefully to his/her staff	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
26	The promotion criteria for jobs are available	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
27	My immediate manager conducts staff meetings in an effective manner	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
28	New employees receive the necessary induction/orientation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
29	My immediate manager manages client (internal or external) relationships well	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
30	I am satisfied with the quality of equipment (computers, software, IT systems), which I use in my work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
31	I think there are enough initiatives to drive diversity in the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
32	Management delivers what they promise	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
33	I am satisfied with the recognition for good performance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
34	I find my work challenging	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
35	My immediate manager is knowledgeable in his/her area of specialisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
36	Regular team building opportunities are arranged for our section	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
37	My immediate manager manages a diverse team well	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
38	I am informed of changes before they actually happen	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
39	I feel part of my team	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
40	I understand the transformation strategy of the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
41	The organisation's future plans (strategy) have been clearly communicated to me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
42	Members of my team are appropriately involved when we have to make a decision	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
43	I receive the training I need to do my job	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
44	I get along well with my immediate manager	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
45	The people I work with are pleasant	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
46	I support the organisation's transformation initiatives	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
47	My immediate manager values the contribution I make	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
48	My immediate manager participates in team activities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
49	The management style of my immediate manager is generally autocratic	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
50	My immediate manager treats employees consistently (in the same way) irrespective of who you are	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
51	I see how transformation in the organisation is going to improve our business	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
52	The management style of my immediate manager is generally participative	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
53	I feel positive about my future in the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
54	Changes are well communicated to those most directly affected	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
55	My immediate manager clarifies misunderstandings if needed	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
56	My salary package is fair in comparison with similar positions in the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
57	My immediate manager demonstrates strong leadership skills	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
58	I feel the organisation really cares for its employees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
59	I am satisfied with the opportunities for career development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
60	My immediate manager leads by example	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
61	The organisation retains its best employees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
62	My immediate manager respects me as an employee	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
63	My job does not cause unreasonable amounts of stress in my life	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
64	I receive regular feedback regarding my work performance from my immediate manager	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
65	The amount of work I am asked to do is reasonable	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
66	My immediate manager does a good job at "people management", dealing with people who work for him/her	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
67	The pace of work enables me to do a good job	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
68	My job responsibilities, objectives and targets, are clear to me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

SECTION 3

Read each statement and tick (✓) the appropriate box.

EXAMPLE:

Question 1: My manager is always friendly.

If you strongly agree with this statement, tick the box below "strongly agree".

Strongly disagree	Disagree	Unsure	Agree	Strongly Agree
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
69	I do not feel any obligation to remain with my current employer	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
70	It would be very hard for me to leave my organization right now, even if I wanted to	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
71	I owe a great deal to my organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
72	Even if it were to my advantage, I do not feel it would be right to leave my organisation now	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
73	If I had not already put so much of myself into this organization, I might consider working elsewhere	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
74	I would be very happy to spend the rest of my career with this organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
75	I would not leave my organization right now because I have a sense of obligation to the people in it	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
76	I do not feel a strong sense of "belonging" to my organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
77	I would feel guilty if I left my organization now	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
78	I really feel as if this organization's problems are my own	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
79	Right now, staying with my organization is a matter of necessity as much as desire	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
80	I do not feel "emotionally attached" to this organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
81	I feel that I have too few options to consider leaving this organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
82	This organization deserves my loyalty	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
83	This organization has a great deal of personal meaning for me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
84	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
85	Too much of my life would be disrupted if I decided I wanted to leave my organisation now	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
86	I do not feel like "part of the family" at my organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

87 What do you see as the organisation's biggest asset and liability?

*Thank You.
The Researcher.*

Appendix E: Permission to conduct study- CEO, CFO

Jacques Louw

From: [REDACTED]
Sent: Friday, 05 August 2016 10:26 AM
To: Jacques Louw
Cc: [REDACTED]
Subject: RE: MBA dissertation.

100%

Kind Regards,

[REDACTED]

[REDACTED]
Chief Financial Officer

[REDACTED]

—
Disclaimer: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

From: Jacques Louw
Sent: 05 August 2016 10:25 AM
To: [REDACTED]@ [REDACTED].com>
Cc: [REDACTED]@ [REDACTED].com>
Subject: MBA dissertation.

Hi [REDACTED]

I am busy with my MBA dissertation and would like to do my research on MD. I would like approval from you to distribute questionnaires to employees to determine the following:

"Assessing the Influence of Organisational Climate on Organisational Commitment of a Company Delivering Services to the Mining Industry"

I have discussed it with [REDACTED] and he agreed. Will it be ok with you if I go ahead?

Kind Regards,

[REDACTED]

Jacques Louw
Financial Manager Central Africa Region

[REDACTED]

Disclaimer: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

Appendix F: Language letter



Antoinette Bisschoff
71 Esselen Street, Potchefstroom
Tel: 018 293 3046
Cell: 082 878 5183
antoinettebisschoff@mweb.co.za
CC No: 1995/017794/23

Tuesday, 22 November 2016

To whom it may concern,

Re: Letter of confirmation of language editing

The dissertation: *Assessing organisational climate and commitment in a mining services supplier* by JJ Louw (20175531) was language, technically and typographically edited. The citations, sources and referencing technique applied was also checked to comply with North-West University's guidelines. Final corrections as suggested remain the responsibility of the student.

Yours sincerely,



Antoinette Bisschoff

Officially approved language editor of the NWU since 1998
Member of SA Translators Institute (no. 100181)

Precision ... to the last letter

Appendix G: Statistical consultation services



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Statistical Consultation Services
Tel: +27 18 299 2852
Fax: +27 087 231 5294
Email: marelize.pretorius@nwu.ac.za

24 November 2016

Re: Dissertation, Mr JJ Louw, student number: 20175531

We hereby confirm that the Statistical Consultation Services of the North-West University analysed the data involved in the study of the above-mentioned student and assisted with the interpretation of the results. However, any opinion, findings or recommendations contained in this document are those of the author, and the Statistical Consultation Services of the NWU (Potchefstroom Campus) do not accept responsibility for the statistical correctness of the data reported.

Kind regards

A handwritten signature in black ink that reads 'M Pretorius'. The signature is written in a cursive, slightly slanted style.

M Pretorius

Subject Specialist: Statistical Consultation Services

Original details: Monique van Deventer(12296307) Q:\Algemeen - nie konsultasie\Styleblaaie_Style sheets\Brief verhandeling_Eng.docm
23 April 2014