



UNIVERSITY OF KWAZULU-NATAL

**A Cross Sectional Quantitative Study on the Psychological Consequences of
Unemployment on the Employed Class in KwaZulu-Natal Toll Industry
Northern Region, South Africa**

By

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of

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ABSTRACT

South Africa has experienced one of the highest unemployment rate since September 2003 in the second quarter of 2017, with an official unemployment rate of 27.7% and an expanded rate of 36.6%. The current unemployment rate has left many people dependent on a single income stream, placing immense pressure on the family's sole provider, impacting the mental, emotional states, and overall wellbeing of the employed. Hence this cross-sectional quantitative study investigated the psychological consequences of unemployment on the working class in the KwaZulu-Natal Toll Industry Northern Region by examining the mental wellbeing of the employed arising from unemployment; effects of unemployment on the employed stress, anxiety, and depression levels and the morale of the employed. The social norm, crossover and spill-over theories were used to help explain this phenomenon.

A questionnaire comprising of 34 questions was developed based on the research undertaken for the literature review in understanding the relationships of the dependent variables and independent variable used to investigate the phenomena. The questionnaire was self-administered to a total of 147 participants identified using probability stratified sampling to achieve a 99% confidence level and maintain a 5% error margin for the KwaDukuza and uMlalazi regions which have varying unemployment rates.

Overall unemployment was found to create mental strain on employed individuals that are in a relationship with an unemployed person, detrimental to the confidence levels of previously unemployed individuals, elevate levels of stress, anxiety and depression of the employed, adversely affect the morale of the employed through interdomain spill-over which was found to have a knock-on-effect on work performance and productivity. The intensity of the unemployment psychological effects varied for men and women in the different regions dependent on the unemployment rate.

The proposed outcomes of this study maybe used to assist employed individuals, organisations and policy makers with pertinent information and insight for creating a better environment that will assist in minimising the psychological stresses experienced by the employed and increase overall productivity.

Key Words: Psychological Consequences, Unemployment, Employment, Wellbeing, Mental State, Stress, Anxiety, Depression, Crossover, Spill-Over, Social Norm Theory

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LIST OF ABBREVIATIONS

Abbreviations	Meaning
UKZN	University of KwaZulu-Natal
KZN	KwaZulu-Natal
H1	Hypothesis One
H2	Hypothesis Two
H3	Hypothesis Three
SS	Sample Size
P	Total Target Population
D	Distribution
CLS	Confidence Level Score
ME	Margin of Error
LOS	Lack of Self Confidence
QOL	Quality of Life
HIV	Human Immunodeficiency Virus
GDP	Gross Domestic Product.
PAF	Principal Axis Factoring
SPSS	Statistical Package for the Social Sciences
IBM	International Business Machines Corporation
ρ	Spearman's Rho Rank Correlation Coefficient
KMO	Kaiser Meyer Olkin
BTS	Bartlett's Test of Sphericity
SAD	Stress, Anxiety, and Depression

CHAPTER 1: INTRODUCTION TO RESEARCH STUDY

1.1 Background to the research

Unemployment is a global problem and is typically higher in developing nations than developed nations. Unemployment negatively impacts the lives of millions of people globally, it does not only affect the unemployed but is also detrimental to economic growth worldwide (Vega, Vega and Cuenca, 2017). The African continent collectively has the highest unemployment rate in comparison with the other continents. South Africa's unemployment rate is one of the highest in comparison with other developing nations (Economics, 2016). According to the data published by Statistics South Africa (2017a) for the second quarter of 2017, South Africa had an official unemployment rate of 27.7% and an expanded unemployment rate of 36.6%. For the same period, KwaZulu-Natal had an official unemployment rate of 24.0% and expanded unemployment rate of 40.4%.

The employed in the informal sector who are either casual domestic workers or self-employed striving to make a living as street vendors earn a low source of income. Many of these people are poor and take on such jobs as they cannot afford to remain unemployed if they wish to fulfil their basic human needs i.e. food, water, clothes, and shelter. Arising from inequalities created by apartheid, black household account for 90% of the country's poverty share. The low income of many black employed people has placed severe strain on these people's ability to survive under the current economic condition (Leibbrandt, Woolard, McEwen and Koep, 2010). The tough economic conditions that South Africa is experiencing has further exacerbated the problem, by increasing the number of unemployed individuals, lessening the family wage for numerous South Africans (Gordan, 2016).

Furthermore, academic studies have shown that there are a significant percentage of households with low income attributed to a single employed source (Mathebula, Molokomme, Jonas and Nhemachena, 2017, Leibbrandt et al., 2010). Due to the current tough economic crisis these employed individuals suffer emotionally, mentally, socially, and physically given the sole responsibility of ensuring survival of their dependants. The evidence presented by Powdthavee (2012) has shown that unemployment is not gender bias and it affects both men and women.

According to Sumner and Gallagher (2017) unemployment is directly related to an increase in cortisol levels also known as a stress hormone in an individual which influences the overall health of the individual. Having one's life partner becoming unemployed was credited as being one of the most stressful life changing events amongst others such as a new born baby or death. Probably since the employed partner has now taken the role as sole-financial provider, alongside work commitment and family social participation, further heightening the stress levels endured by the employed partner. This alters the individual's mental state and influences work performance (Erdogan, Bauer, Truxillo and Mansfield, 2012). The stresses experienced during unemployment negatively impacted both the unemployed and the employed individuals within the union on a daily basis in varying degrees depending on their life events (Song, Foo, Uy and Sun, 2011).

From a macro perspective, unemployment influences employed people's perceptions of available employment prospects. High unemployment rates in areas hampers growth potential of employed people earning a sub minimum wage as they are demotivated to seek greener pastures, fearing unemployment (Ardington, Bärnighausen, Case and Menendez, 2015). This contributes to poor mental health and life dissatisfaction which concurs with current stress theories that the external environmental conditions are determining factors of mental stress and employment dissatisfaction (Giorgi, Shoss and Leon-Perez, 2015).

Employee morale is low in areas with high unemployment rate which brings about a subtle difference in the emotional state between employed and unemployed people. This can cause greater levels of despair in the employed thereby creating a higher perception of employment insecurity (Dixon, Fullerton and Robertson, 2013), feelings of blame, greater workload in receding work sectors and scarcer job alternatives for the employed (Benach, Vives, Amable, Vanroelen, Tarafa and Muntaner, 2014).

In the workplace, co-workers interaction is inevitable, hence creating a positive work environment is essential to maintain productive employees (Laschinger and Read, 2017). Workplace stress was found to be detrimental to the employee's morale irrespective of gender type (Anthony-McMann, Ellinger, Astakhova and Halbesleben, 2017).

Given the issues associated with unemployment and the impact it has on the mental and emotional state of employed people, coupled with the detrimental effects unemployment has on workplace morale, this study aims to provide an understanding of the psychological consequences of unemployment on the employed.

Since there is currently a gap in the available literature pertaining to this singularity, it is crucial to understand this phenomenon and the related implications in order to create a more productive, stress free work environment for the employed. To help in explaining the emotional, mental, and physical state of the employed in relation to unemployment the social norm, cross over and spill over theories will be used.

1.2 Focus of the study

The core focus of this study was to understand the psychological effect unemployment has on employed individuals through their encounters with unemployed friends, family and society at large in their daily lives, by examining the mental wellbeing of the employed shaped by the effects of unemployment; the impact unemployment has on the intensity of stress, anxiety, and depression experienced by the employed; and the morale of the working class due to the psychological consequences of unemployment.

Thereafter, this study focused on providing recommendations to mitigate the challenges faced by the employed caused by unemployment, to contribute in creating a better quality of life for the employed both mentally and physically, and to improve work performance and productivity by facilitating in creating an employment environment that eliminates or minimises the psychological effects unemployment has on employee's morale.

1.3 Problem statement

South Africa's unemployment rate is one of the highest in comparison with other developing nations (Economics, 2016). The current recession and political instability that the country is facing has further intensified the unemployment crisis. Many authors have found that recession has a high correlation with an increase in unemployment levels (James, 2017, De la Rica and Rebollo-Sanz, 2017, Fountoulakis, Koupidis, Siamouli, Grammatikopoulos and Theodorakis, 2013).

This high unemployment rate has psychological effects on employed people as it raises concerns of employment security and places additional financial burden on employed

individuals supporting many dependents. The adverse psychological effects of unemployment have implications on the employed individual's ability to perform and function optimally at work, thereby affecting overall company productivity. There is currently no literature on the psychological effects of unemployment on the working class and the impact it has on work morale, paving the way to understand this phenomenon and the related implications.

1.4 Purpose of the study

This study addresses the psychological consequences of unemployment on the employed class in KwaZulu-Natal Toll Industry Northern Region. The purpose of this cross-sectional quantitative study is to investigate, measure and determine, firstly the degree that unemployment has on the employed mental wellbeing. Secondly, whether unemployment increases the stress, anxiety, and depression level of the employed or not. And finally, how work morale of the employed is affected due to the unemployment levels?

1.4.1 Specific objectives

- (a) To identify the psychological consequences of unemployment on the employed class in the Toll Industry.
- (b) To understand whether the level of stress, anxiety and depression increases on the employed due to the high unemployment rate.
- (c) To evaluate the impact the psychological consequences of unemployment has on the morale of the employed in the Toll Industry.
- (d) To suggest and propose recommendations to mitigate the challenges faced by the employed arising from unemployment.

1.4.2 Hypotheses

The specific research objectives were translated into hypotheses 1, 2 and 3 that could be tested statistically to establish the association between the independent and dependent variables. This facilitated in the conceptualisation of the framework as depicted in section 3.14 showing the interactions between the independent and dependent variables.

1.4.2.1 Hypothesis 1: Psychological consequences of unemployment on the employed

- **H_{1.0}:** There are psychological consequences (dependent) resulting from unemployment (independent variable) on the employed class in the Toll Industry.
- **H_{1.1}:** There are no psychological consequences (dependent) resulting from unemployment (independent variables) on the employed class in the Toll Industry.

1.4.2.2 Hypothesis 2: Stress, anxiety, and depression levels of the employed due to the unemployment rate

- **H_{2.0}:** The employed (dependent variable) suffer from increased levels of stress, anxiety, and depression due to the unemployment rate (independent variables).
- **H_{2.1}:** The employed (dependent variable) do not suffer from increased levels of stress, anxiety, and depression due to the unemployment rate (independent variables).

1.4.2.3 Hypothesis 3: Morale of the employed considering the unemployment rate

- **H_{3.0}:** The morale (dependent variable) of the employed in the Toll Industry is affected by the psychological consequences of unemployment (independent variable).
- **H_{3.1}:** The morale (dependent variable) of the employed in the Toll Industry is not affected by the psychological consequences of unemployment (independent variable).

1.5 Expected outcome of the study

Employment is the central link amongst economic growth and improved living standards, a positive employment environment is the main driver for sustainable social transformation. Understanding what impacts an individual mental state is fundamental to put effective drivers or motivational measures to encourage people to do their best at work, which will then increase productivity and create a competitive advantage for enterprises amongst their rivals.

The understanding of the psychological effects of unemployment on the employed is essential in providing policy makers with pertinent information and insight for creating a better environment that will assist in minimising the mental, physical, and emotional

stresses on the employed. Furthermore, government can focus on reducing the poverty within the working class and introduce measures to improve their quality of life.

1.6 Theoretical framework

The theories that underpin this study are the social norm, crossover and spill-over. The social norm theory is used to explain the various effects of unemployment on an employed individual's mental wellbeing based on societal norms as to what is perceived acceptable by society from a macro perspective.

The crossover theory is used to explain the phenomena pertaining to how the effects of unemployment on the employed individual's family and friends affects the mental, social, and physical wellbeing of an employed individual from a micro perspective. Spill-over theory will explain the impact unemployment has on the employed individual's mental state via interdomain i.e. family, friend and work domain transfer of stresses, anxiety, and depression.

The interaction between the dependent and independent variables identified in the empirical review in chapter 2.3 from a macro to micro perspective are described in the theoretical review in chapter 2.2 via the social norm theory (Macro perspective), crossover and spill-over theories (Micro perspective).

1.7 Methodology

The Toll Industry was chosen because of the diverse range of employees which could be categorised into 3 levels i.e. foundational level (Toll Collectors), midlevel (Supervisors and Admin Staff) and upper level (Managers), thereby allowing for a more comprehensive understanding of how the psychological consequences of unemployment affects employed people at various income streams.

A questionnaire was developed based on extensive research on the effects of unemployment on families, friends, and society in general from a social norm perspective, the direct and indirect impact unemployment has on the mental wellbeing of the employed, the crossover and spill-over effects of stress, depression, and anxiety between individual and their relative domains and the effect job insecurity arising from unemployment has on the morale of employee.

The questionnaire was self-administered to 86 toll plaza employees at the oThongathi and Mvoti toll plazas which are in KwaDukuza region of KwaZulu-Natal and 61 toll plaza employees at the Mtunzini toll plaza which is in the uMlalazi region of KwaZulu-Natal. These two regions were targeted due to KwaDukuza having a lower unemployment rate than the uMlalazi region.

1.8 Definitions for the study

1.8.1 General definitions

- (a) Toll Road: is the section of a national road which has been declared a toll road in accordance with the South African National Road Agency Limited (SANRAL) Act and encompass one or more toll plazas.
- (b) Toll Plaza: is a structure on a toll road where tolls are payable.
- (c) oThongathi Toll Plaza: is a toll plaza located on a section of the N2 North Toll Road that pass through the KwaDukuza region.
- (d) Mvoti Plaza: is a toll plaza located on a section of the N2 North Toll Road that pass through the KwaDukuza region.
- (e) Mtunzini Plaza: is a toll plaza located on a section of the N2 North Toll Road that pass through the uMlalazi region.
- (f) Toll Collector: any individual selected to perform the functions pertaining to the collection of toll fees in a lane.
- (g) Toll Employees: comprises of all individuals working at the toll plaza.
- (h) Labour force participation rate: is a gauge of the active percentage of an economy's workforce. Labour force participation rate refers to the number of individuals who are either actively in search of employment or are working.

- (i) Labour force absorption rate: is the number of individuals who are of employment age to the number of people that are working.
- (j) Dependency ratio: The dependency ratio is a measure highlighting the number of dependents that are either less than or equal to 14 years and/or greater than 65 years, to the total number of people aged 15 years to 64 years.

1.8.2 Operational definitions

The operational definition for all the important constructs and variables investigated, examined, and measured in this study are:

- (a) The term “**psychological**” used in this research refers to mental and emotional state of an individual. “**Psychological consequence**” due to unemployment is ascertained in this study by measuring how the emotional and mental states of an employed individual is affected due to sense of fear, anger, sadness, worthlessness, empathy, depression, stress, anxiety, and worries via the use of an ordinal scale 5 factor rating Likert-type questions.

The level of the psychological effect is determined by examining the extent to which a participant strongly agrees to strongly disagrees to questions presented in the questionnaire relating to emotional and mental states of the participant.

- (b) The terms “**morale of the employed**” used in this research study refers to the emotions, feelings, satisfaction, and overall mental state of employees when they are in the workplace environment. The “**morale of the employed**” because of unemployment is determined by measuring the fears of job loss, stressor arising from the family domain due to family members experiencing unemployment and job satisfaction via the use of an ordinal scale 5 factor rating Likert-type questions.

1.9 Delimitations of the study

This study did not focus on how the personalities of employed individuals impacted on their experiences when evaluating the psychological effects of unemployment on the employed, as this would create further complications to the study. Other pre-existing factors that could have an impact on the employed individuals stress, anxiety, depression levels and mental wellbeing such as HIV, terminal illness, eating disorders, loss of a

family member, physical abusive partner, etc. were omitted as these factors were not the primary focus of this research study.

Impact on morale at the workplace due to workplace conflict between co-workers such as rudeness, disrespect, and ill-mannered behaviours towards one another within an organisation as pointed out by Rosen, Koopman, Gabriel and Johnson (2017) were not the focus of this research.

1.10 Limitations (anticipated shortcomings)

The research presented here will be limited by the measures used. Since the environment is composed of various uncorrelated facets. Furthermore, the study was cross-sectional in nature and assessed the respondent's perception pertaining to unemployment and how it impacted their lives at a specific time. The study did not factor other negative or positive externalities that could impact on the respondent's state of mind when providing responses on the subject matter. Additionally, the results of this study could not be completely generalisable because of the restricted sample size of 147 participants.

The limitations were controlled by ensuring that the questionnaires were not issued to respondents that were seen to be emotional. The questionnaire was issued to the respondents giving them ample time to respond, ensuring that they were not time pressured in any way or form to answer the questionnaires.

1.11 Assumptions

Various levels of unemployment have different effects on the mental and emotional states of the employed. Assumption made is that employed individuals residing in a region which has an elevated level of unemployment and a greater dependency ratio will experience a greater level of job insecurity, mental stress, anxiety, and depression. Employed individuals living in regions which have a lower level of unemployment and dependency ratio will experience a lesser level of job insecurity, mental stress, anxiety, and depression.

1.11.1 Theoretical assumptions

The various theories such as the social norm, spill-over and crossover were used to identify the casual relationship of the psychological consequences of unemployment on

the employed based on the premise that the effects of perceptions are self-perpetuating, as they encourage the expression of feelings together with actions that are believed to be conforming.

Proper facts pertaining to a definite norm will inspire people to prompt opinions that are in line with the enhanced norm and inhibit problematic behaviours that are unpredictable. People who do not individually partake in problematic behaviour can add to the problem by the way in which they discuss the behaviour. Confusion functions to reinforce views and values that the transporters of the misunderstanding do not themselves hold and contribute to the environment that inspires problem behaviour. For a norm to spread it is superfluous for the masses to be certain of it, but only for most people to believe that the majority accept as true.

1.11.2 Methodological assumptions

This cross-sectional quantitative study is multifaceted and hence deals with the nature of the phenomenon being effects of unemployment on the employed. Questionnaires would permit the academic to describe, measure and determine the psychological consequences of unemployment on the employed class in KZN Toll Industry quantitatively.

1.11.3 Assumptions about measures:

Standard administration practices were adhered to; participants properly resemble the norm clusters for the measures. The questionnaires were controlled in an analogous manner for all participants. Numerous factors can affect the score besides the characteristic, attribute, trait that are being measured.

Factors related to the environment, the participants such as illness, fatigue, and the questionnaire i.e. ability to understand the questions, can all affect the outcome. Therefore, in an attempt to minimise the effects arising from external factors, all the participants answered the questionnaire under similar conditions.

1.12 Structure of the study

The chapter format of this research study is sequentially structured to provide the reader with the introductory background to the study, the literature review undertaken, research

methodology employed, analysis and presentation of the data, interpretation, and discussions of the data together with the conclusion, recommendations and limitations.

Chapter 1: Introduction

This chapter provided the introductory background to this research study, the focus area of the study, problems that the study intended to answer, the purpose and the expected outcomes for the study, the theories underpinning the study, the definition to general and operational terms used, the delimitation, limitations, and assumption made in this study.

An outline discussing the structure of the chapters to follow for this research study and the interrelationship amongst the chapters are explained.

Chapter 2: Literature Review

This chapter offers an overview of the available literature relating to theoretical review and the empirical review, the methodology employed together with the search engines used to search for the most current literature available. The theories underpinning this research study are discussed in the theoretical review and the interaction between the dependent and independent variables associated with each hypothesis are explored, discussed, and investigated in the empirical review.

The theoretical review discusses the literature pertaining to the social norm theory, crossover theory, and the spill-over theory and how these theories are relevant and applicable to this research study.

The empirical research confers scholar findings relating to unemployment and the psychological implications it has on the employed mental, social, physical well-being, quality of life and confidence levels. Relevant literature pertaining to stress, anxiety and depression experienced by the employed and the unemployed due to unemployment is discussed. Thereafter, related literature pertaining to the impact unemployment has on the morale of the employed and the related implication it has on productivity and overall work performance is discussed under the empirical literature review. Key variables are identified from the empirical literature and where used to formulate the research instrument.

Chapter 2 ends with a summary of the available literature and the gaps in the available literature together with the contribution value that this study adds to the existing literature.

The subsequent chapter discusses the research methodology used to gather and analyse the data for the study which was used to test the conceptual model conceived from the literature review.

Chapter 3: Research Methodology

This chapter outlines the research methodology developed and used for the study. The study adopted a cross-sectional quantitative design with positivism philosophy by utilising a questionnaire type instrument. The area of study was chosen to ensure that the area facilitated in the verification and understanding of theories discussed in the theoretical review of chapter 2.

The target population, methodology used in selecting the most appropriate representative sample size, the research instrument design, the pretesting of the research instrument to identify defects in the research instrument, the data collection techniques and data analyses involving the use of descriptive statistics to observe the central tendencies and inferential statistics methods to provide a detailed understanding of the variables behaviours and relationships in terms of the conceptual framework are explained and discussed.

Ethical consideration, validity and reliability techniques adopted and employed at the various stages in this research study are described. The effects of biases that could impact the reliability and validity of the study are explored, and proposed mitigations against the various biases during the various stages of this research study are provided.

The next chapter provides the data analysis and visual presentation of the analysed data that was collected from the respondent using the research methodology provided in this chapter.

Chapter 4: Data Analysis and Presentation

Chapter 4 presents the participation statistics of the survey undertaken together with the reliability analysis of the data for the KwaDukuza and uMlalazi regions. Followed by the differential statistical analysis for the demographics; the responses to the 21 questions associated with the psychological consequences of unemployment on the employed and its impact on the stress, anxiety, and depression levels of the employed; the responses to the 7 questions pertaining to the morale of the employed due to unemployment rate were discussed, presented and summarised by using tables, figures, and graphs.

Thereafter, inferential statistical analysis was performed using factor reduction techniques on the individual 28 ordinal scale Likert questions containing the dependent variables associated with each of the three main objectives under investigation for each region separately, to disregard weak components that are considered as negligible to the model. The chapter concludes with the summary of the data analysis.

The discussions pertaining to the linkage between the literature, data analysis and the three main objectives of this research study together with the conclusions are presented in chapter five.

Chapter 5: Discussion Of Results

This chapter examined the three hypotheses and their corresponding null by formulating rational deductions from the analysed data presented in the previous chapter with the literature review undertaken in chapter two, in determining if the hypotheses are valid or not.

The next chapter provides a summary of the main findings with the implications of the study together with recommendations to help alleviate the mental impact that unemployment has on employees and their organisations. Thereafter known constraints to the generalisability and applicability of the research are conferred.

Chapter 6: Conclusion, Implications, Recommendations And Limitations

This chapter presents the identified key outcomes and implications of the findings based on the discussions of the three hypotheses in the previous chapter. Thereafter, recommendations to mitigate the challenges faced by employed individuals in the toll industry arising from unemployment levels that influences morale at the workplace are provided. Next, recommendations for future studies are proposed and limitation identified are documented. Finally, the chapter concludes with an overall summary.

1.13 Summary to research background

The introductory background to this study was discussed based on the latest available scholarly research relating to the effects of unemployment from a global arena to a continent level and finally to the region of the study. The effects of unemployment were identified to have devastating psychological effects on the employed and the unemployed. The core focus of the study was discussed, which was to provide an understanding, and

to mitigate against, the psychological consequences of unemployment on the employed given the issues linked with unemployment and the impact it has on the mental and emotional state of employed people, coupled with the detrimental effects unemployment has on workplace morale.

Next, the problems that the study intended to answer, the purpose, specific objectives, the expected outcomes for the study, the theories underpinning the study, methodology employed, the definition to general and operational terms used, the delimitation, limitations, and assumption made in this study were discussed.

Finally, an outline discussing the structure of the chapters to follow and the interrelationship amongst the chapters were provided. The next chapter looks at all the relevant literature applicable to this research study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature presented in this chapter is broken down into two major segments i.e. theoretical review and the empirical review. The theoretical review focuses on the social norm, crossover and spill over theories which are central to this research study and are reviewed using the latest available research. Thereafter, the empirical review will focus on the related and interrelated variables which are pertinent to this research study. The composition of the empirical review emanates from the objectives and focuses on scholarly research studies which are relevant to provide the reader with an overview of unemployment and employment, the psychological effect of unemployment felt by the employed, stress, anxiety and depression experienced by the employed arising from unemployment, and finally the impact unemployment has on the morale of the employed.

Various sources were utilised amongst Google Scholar, EBSCOhost, Emerald Insight, Taylor and Francis, Statistics South Africa, Government Documents, Websites, Books together with information obtained from National Treasury to find the most up-to-date information relating to unemployment and its impact on the employed class. However, limited information was found on the initial search that was specific to the topic i.e. *“Psychological Consequences of Unemployment on The Employed Class”* and hence a broad term search was employed to find related information from numerous journals.

2.2 Theoretical review

The theoretical literature review will discuss the theories underpinning this research study by firstly, focussing on the social norm theory from a macro perspective which investigates how society perceives unemployment in regions with high and low unemployment rates, societal beliefs on the roles of working men and women and its perceived impact on both the employed and the unemployed. Secondly, the crossover theory relating to how stress, anxiety and depressions affecting unemployed individuals is projected on to the employed. And finally, the spill-over theory will be discussed and how it will be used to provide an explanation as to how the psychological consequences of unemployment in the family / friend domain transcends into the work domain and the associated implication on employee morale in the work environment.

2.2.1 Social norm theory

Social norm theory constitutes a focal theme in economics and human sciences. It is frequently used to clarify or explain behaviours. If values are shared by other individuals, it can be accepted by society as a standard. The development of the social standard is generally left vague, yet its advancement relies upon the conduct of societal individuals or pertinent others. Social standards can succeed in people in general (Buffel, Missinne and Bracke, 2017).

Social standard hypothesis is derived from the possibility that individuals are concerned with their relative standing in society. The way in which individuals assess and see their circumstance relies upon how they fit in with or stray from the standards of the social reference cluster (Winkelmann, 2014). A vast accumulation of social examination concentrates on social standards which has connected the theory to a scope of extremely different themes, from human participation to self-perception. In employment, social norms appear to assume a critical part, for instance livelihood responsibility (van der Wel and Halvorsen, 2014).

According to Coleman (1994), the social norms from a micro to macro perspective is the individuals actions in relation and approval to societal norms as depicted in Figure 2.1.

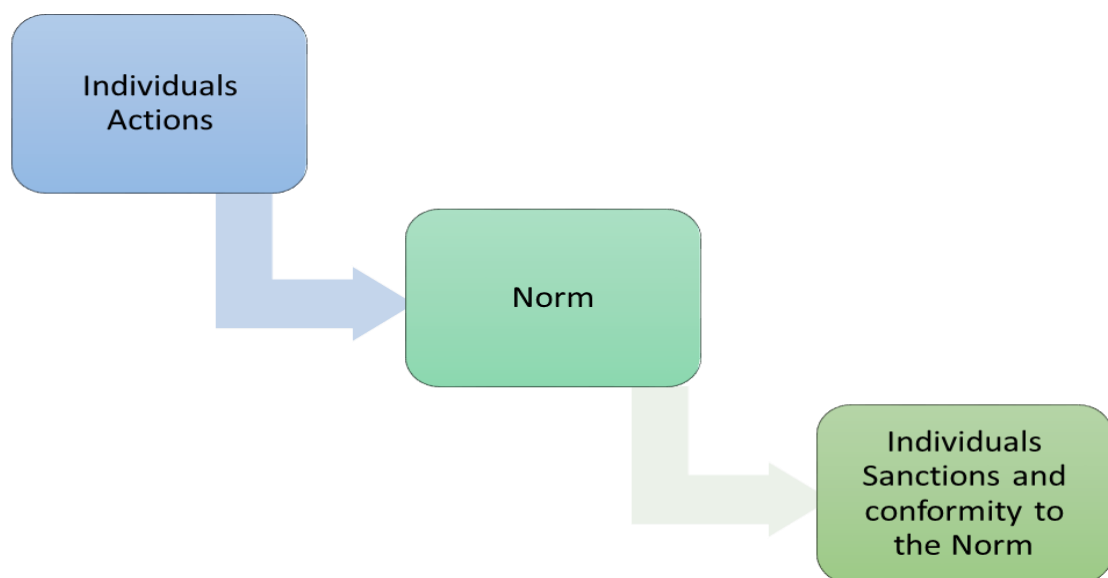


Figure 2.1: Individuals actions in relations to the social norms from a micro to macro perspective

Adapted from Coleman, J. S. 1994. **Foundations of Social Theory**, Belknap press of Harvard University Press. p245.

Gathergood (2013) evidence suggest that the psychological effects of unemployment are less pronounced in areas where there is a high unemployment rate and more devastating in areas where there is a low unemployment rate. The probable reason is that in areas with high unemployment, the stigmatisation associated with unemployment has negligible effect as it is taken to be a social norm in contrast to regions with low unemployment. In regions where there is a low unemployment rate, employed individuals may have a higher fear of losing their jobs given the stigma attached with being unemployed.

Research conducted by Howley and Knight (2016) found that there is a small utility gap between individuals that are employed and those that are unemployed in regions where total unemployment rates are high, which is consistent with the social-norm effect. Furthermore, this research demonstrated that the collective level of unemployment in a region differentially affects the well-being of the employed individual. However, this research does not factor the psychological effects of unemployment on areas where the employed people are the breadwinners in households and the rest of the family members that are of employment age failed to obtain employment.

The social norm theory is pivotal in examining the psychological consequences of unemployment on the employed given the stigmatization attached to unemployment in areas with a low unemployment rate, forcing people to take up job opportunities that they were not keen in doing but did not wanted to be branded as unemployed (Buffel et al., 2017).

The research by Mendolia (2014), based on British Household Panel Survey has shown that unemployment does not only harm an individual mentally and physically but is also detrimental to the employed individuals within the household where the unemployed individual resides. The negative effects on mental wellbeing and quality of life resulting from unemployment on the family members is much more pronounced if the man of the household becomes unemployed in comparison to the female of the household becoming unemployed. One possibility for this outcome is that traditionally the man of the house was perceived by society to be the financial provider of the family unit, hence being unable to fulfil this responsibility creates more tension within the household (Charlebois, 2017).

In the subfield of unemployment, social standard hypothesis can yield vital experiences into the connection between unemployment and its perceived effect on both the employed and the unemployed. The social norm theory is pivotal in providing an explanation on how unemployment is perceived by employed individuals at the three toll plazas which are situated in two different municipalities with varying unemployment rates.

2.2.2 Crossover theory

Cross over theory is used in psychology to explain the phenomena of stress, tension and strain that is exchanged from one individual to the next, for example the stress and tension of an unemployed husband has on his wife (Bünnings, Kleibrink and Weßling, 2017). Crossover can be considered as a binary system of individuals in a domain that generate parallel reactions within one another (Ametorwo, 2016). This implies that the crossover effect is not isolated to the person experiencing stress, depression, and anxiety but it is also projected on to the other individual within the binary system.

The crossover effect of anxiety, depression, and stress due to unemployment can be transferred from an unemployed individual to their employed partner/ family member/ friend as conceptualised in Figure 2.2.

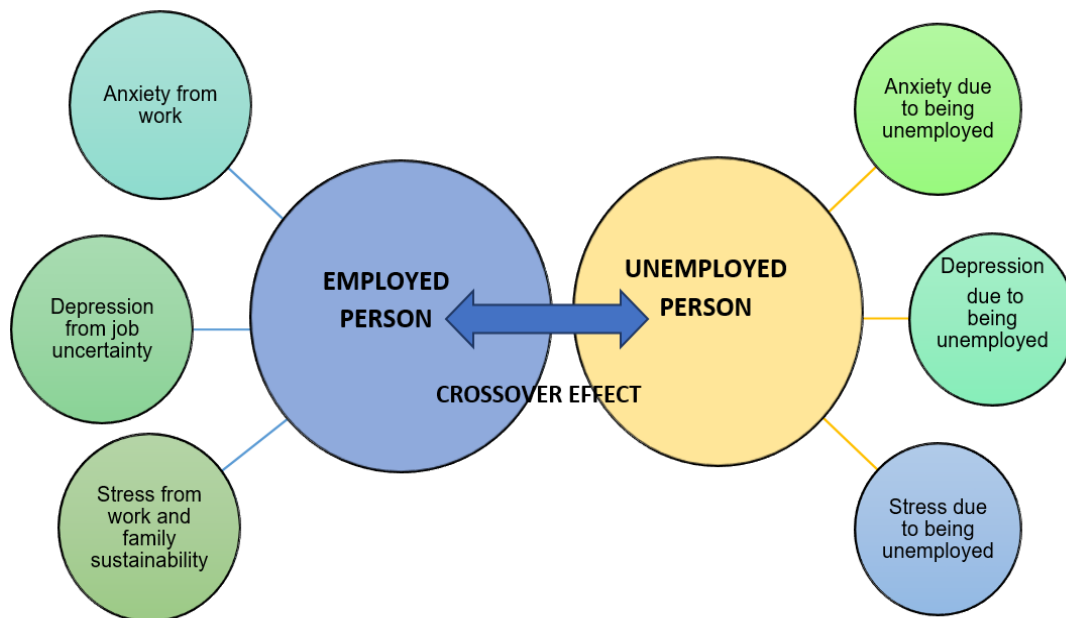


Figure 2.2: Crossover effect due to the psychological consequence of unemployment on the employed – Source Author's Conceptualisation.

Due to the current economic crises in South Africa, many employed people that reside in household with family members that are victims of unemployment experience poor

wellbeing due to financial constraints (Lilenstein, Woolard and Leibbrandt, 2016). The current high unemployment rate and poor economic outlook imposes stress on a person brought about by continual uncertainty of future employment which has a negative effect on a person's wellbeing and mental state (Caroli and Godard, 2016).

Research undertaken by Afifi, Davis, Merrill, Coveleski, Denes and Afifi (2015) has found that there is a direct correlation as to how employment uncertainty of one partner negatively impacts on the mental wellbeing of their companion due to stress and anxiety stemming from concern pertaining towards future financial circumstance of the partnership. This is specifically inclined to remain constant when the individual who fears unemployment is the breadwinner. The financial uncertainty associated with unemployment on the employed individual within the family unit is negatively impacted by an increase in cortisol level also known as stress hormones arising from family members concerns due to the crossover effect (Kang and Hong, 2017).

Mauno, Cheng and Lim (2017) who investigated the connection of a spouse's perception of employment uncertainty and mental welfare of the family, found that tension, worries and anxiety induced by employment uncertainty adversely affected the mental state of all members of the family. Furthermore, the empirical data indicated that there was a stronger adverse effect to fears of unemployment in single-income family units. These studies confirm the notion that unemployment has an adverse effect on employed as well as unemployed people.

The research undertaken by Lu, Lu, Du and Brough (2016), which investigated the crossover effects of work-family conflict amongst Chinese couples, found that stress due to each partner's specific life situation severely influenced the other's life. The jobless companion experiences an increased level of stress due to not having employment while the employed partner felt stressed because of the monetary responsibility associated with being the sole financial provider in the relationship. The anxiety that both partners felt may crossover to each other thereby increasing their individual anxiety levels. The outcomes demonstrated that there essentially were negative crossover effects on employed men on their wife's family fulfilment, physical and mental prosperity and vice versa. The crossover effect of the stress due to unemployment on the employed family member had varying degrees of impact based on the gender of the employed individual.

One of the noteworthy finding made by Anchustigui (2016) is that the minor stresses that each partner experience has an extreme overall stress effect on the family unit due to the shared couple experiences which are simultaneously affected by conflicts and demands arising from unemployment on the employed partner. The unemployment of one partner in the union can contribute to an increase in marital and overall social dissatisfaction amongst the partners.

An individual's employment uncertainty within a union creates a further resource danger to the partnership. The employment uncertainty either partner experiences has an adverse effect on the other partner's participation and engagement at work. Men experience a stronger adverse relationship between employment uncertainty and engagement at work that negatively impacts on their mental and physical health which is directly related to their wives employment uncertainty level. (Debus and Unger, 2017).

Crossover theory is essential in explaining the psychological consequence unemployment has on an employed individual due to members in his/her incircle experiencing unemployment or job uncertainty.

2.2.3 Spill-over effect

Spill-over effect theory is used in psychology to explain how the propensity of an individual's emotional state in one domain can be projected on other individual's feelings around the individual in the next domain. For example, in a household with significant number of unemployed individuals that have been dismissed or retrenched because of the poor economic growth, the associated stresses, anxiety, and tension of unemployment can spill-over from the employed member's family domain to his work domain (Park and Kang, 2016). Spill-over effect can be used to describe the stresses, anxiety and depression transferred from work domain to the family domain and vice versa. Work and family spill-over comprises of the exchange of feelings amongst family and work spheres (Ametorwo, 2016). This implies that the effects felt in one realm will probably affect the experiences felt in the next realm.

The spill-over effect of stress, strain and insecurities experienced in the work domain can spill-over to the individual's family domain and vice versa i.e. the stress, strain, lack of confidence, depression and anxiety caused by unemployment in the family/ friend domain

felt by the employed individual can spill-over to the work domain as conceptualised in Figure 2.3.

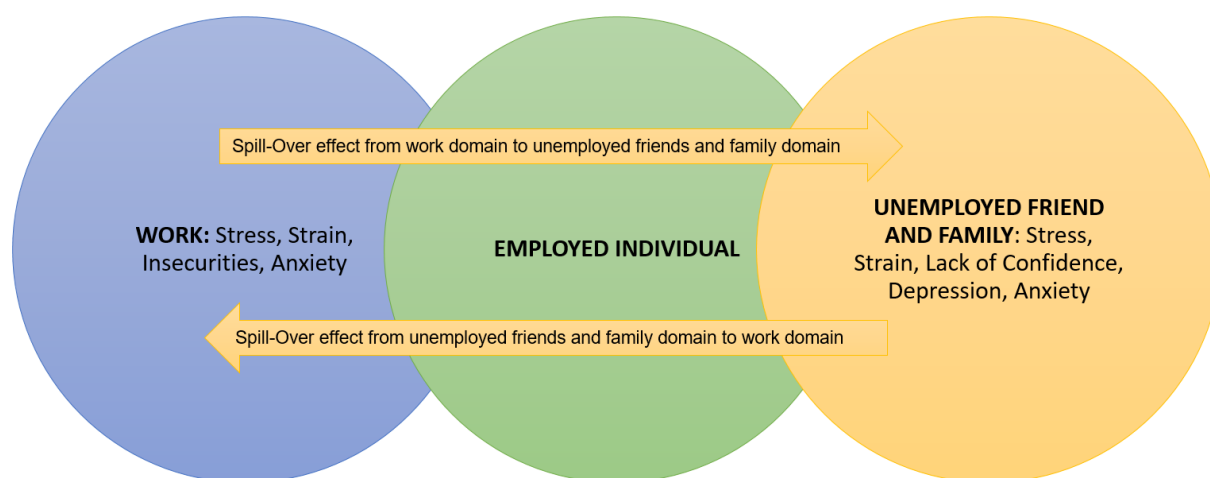


Figure 2.3: Spill-over effect due to the psychological consequence of unemployment on the employed – Source Author's Conceptualisation.

Gough (2017) found that employment uncertainty of one member in a marriage can adversely affect the entire marriage as well as the family dynamics. The research by Carlson (2015) goes even further to demonstrate how unemployment uncertainty may even spill-over to family members that are still to be conceived by continual threat of low birth rate attributed to possible future unemployment.

Bünnings et al. (2017) have shown that unemployment affects the mental wellbeing of both partner's and not just the unemployed individual. This finding was made by utilising information presented in the German Socio-Economic Panel Study (SOEP) between 2002 and 2010. Further observation made was that a person who was unemployed for one year had a reduction in mental wellbeing by 27% of the standard deviation of jobless individuals and their employed partners had a reduction in mental wellbeing by 19% of the standard deviation. Since the social norm traditionally was for the husband to be the financial provider for family units, the research shows that the reduction in mental wellbeing was more pronounced when the male partner became unemployed.

Kunze and Suppa's (2017b) research that investigated the effects an individual's job loss has on their significant other's social participation utilising German panel information found that there was a direct correlation between unemployment and a couple's social activities. The effects of unemployment negatively impacted on social activities of both

the employed and the unemployed individuals within the union. This result could be rationalised by the fact of habituation and suggest labour market policies should ensure that spill-over effects within couples are taken into consideration.

Du, Derks and Bakker's (2017) study that investigated a mediated moderation model of daytime effects of family disturbances in conjunction with family work spill over (distress and perception) on the relationship amongst work resources and employees' being successful at work, found that the demands from the family domain induced repetitive undesirable feelings or thoughts about the hassles experienced, thereby hindering the individuals ability to function effectively, and to optimally utilise the contextual resources in the work domain. The outcome of this study was based on multilevel analysis using 108 employed Chinese respondents surveyed daily for 366 days. The research further inferred that employed individual performance between morning and evening work hours were suggestively positive when employee's subsequent day family problems were low; the association was noticeably nonsignificant when the subsequent day family issues were elevated.

Spill-over theory is central in explaining the psychological projection of unemployment over the employed individual's mental wellbeing via interdomain i.e. work and family/friend domain exchange of experiences. Most of the available literature pertains to the effect of unemployment on the unemployed but fails to delve into the psychological effects that unemployment has on employed individual and how it may affect the performance of the employed at work through the spill-over effect it has on the business cultural environment.

2.3 Empirical Review

The empirical literature review distillates the available literature of unemployment and the effect unemployment has on the employed class by examining the current literature offered for both unemployment and employment, various definitions of unemployment, unemployment statistics in area of study and the social impact of unemployment on society in South Africa. Thereafter, the psychological consequences of unemployment on the employed is investigated by focusing on the wellbeing and quality of life, loss of self-confidence, social life experiences, and spousal relationships of the employed. The stress, anxiety, and depressions levels of the employed due to the high unemployment

rate was researched by concentrating on the breadwinner, poor economic outlook and its impact on the employed, dependent's tertiary education rising cost and the mental stressors of the "missing middle" employed households. Furthermore, the work morale of the employed, considering the unemployed rate, is explored by researching related literature on the unemployment rate and morale, work performance and productivity, unemployed partner's impact on employed morale, and job insecurity.

2.3.1 Overview of unemployment and employment

2.3.1.1 Overview and associated effects of unemployment

Unemployment is a global problem. Unemployment has negatively impacted the lives of millions of people globally, unemployment does not only affect the unemployed but is also detrimental to economic growth worldwide (Vega et al., 2017). The African continent collectively has the highest unemployment rate in comparison with the other continents in the world. South Africa's unemployment rate is one of the highest in comparison with other developing nations coupled with negative GDP and high Inflation (Africa, 2017b). Because of the inequalities created by apartheid, black household still account for 90% of the country's poverty share. The low income of many black employed people has placed severe strain on these people to survive under the current economic condition (Leibbrandt et al., 2010).

Study by Calvo, Mair and Sarkisian (2014) have found that a rise in unemployment globally has a direct correlation with poor mental and physical wellbeing. Unemployment is not only detrimental to unemployed individuals but it also has an adverse effect on employed individual's life satisfaction, especially in regions where there is a high rate of unemployment coupled with high inflation (Arampatzi, Burger and Veenhoven, 2015).

2.3.1.2 Unemployment defined

Unemployment is categorised into two terms namely narrow and expanded definition of unemployment. The narrow or often referred to as the official unemployment definition only looks at persons between the ages of 15 years to 64 years that are not employed for the last 7 days of the survey; are actively seeking employment in the 4 weeks prior to the survey; are able to work in the week of the survey or did not look for a job in the last month but where employed or promised work in the future. The broad definition of unemployment is the total number of people aged between 15 years and 64 years that are able and willing to work less than the number of people employed (Africa, 2017a).

There are many limitations arising from the subjectivity in the narrow definition of unemployment which may affect the accuracy, often when the unemployment rate is relatively high in identifying discouraged individuals (Lloyd and Leibbrandt, 2014).

2.3.1.3 Social impact of unemployment on society in South Africa

Since the fall of apartheid, the social support system has increased substantially with a huge increment of disability grants, and three fifths of children with care givers receiving child support grants. Furthermore, the recession South Africa experienced has further aggravated the problem, by expanding the number of unemployed individuals, thus lessening the family wage for numerous South Africans (Woolard, Harttgen and Klasen, 2010).

Given the South African liberal social pension initiative, numerous unemployed individuals can live without work. This further contributes to the unemployment phenomena as people with household receiving a social grant do not place any emphasis on searching for employment. Hence, the incorporation of social state pensions can be seen as a determining factor in the measures of effective experience of unemployment (Griep, Baillien, Vleugels, Rothmann and De Witte, 2014). The tough economic conditions have further exacerbated the problem, by increasing the number of unemployed individuals, lessening the family wage for numerous South Africans. This has impacted on the employed class by having to contribute more to the fiscus in the form of more taxation, given the small pool of tax payers (Gordan, 2016).

Studies conducted by Griep et al. (2014) have found unemployment to be associated with signs of emotional state of despair, disquiet, negativity, dispiritedness, diminished self-confidence. This study links unemployment to social consequences of violence, intemperance, abuse, and alienation with the public. Many of the unemployed turn to a life of crime as a source of income whereby they tend to target the employed class for monetary gain.

The youth, especially the majority black youth are affected the most by the high unemployment rate due to lack of education, poverty and inequalities that are still prevalence in South Africa today. According to research conducted by Karodia, Rehman and Soni (2016), the high unemployment rate is due to government's inability to address the problem by the implementation of policies to drive youth employment in the private sector. Studies conducted by Mago (2014) found that youth unemployment creates socio-

political and economic difficulties in societies. The socio-political issues include wrongdoing, violence, brutality, substance abuse, prostitution, gangsterism, and crime. Unemployment further contributes to an increase in alcohol abuse resulting in further social problems (Popovici and French, 2013). Thus, the astute youngsters who neglect to secure employment, use innovation to hack bank accounts and initiate cash withdrawals or exchanges. These actions have resulted in set-backs in economic progress. This would in turn leads to fear, security concerns, safety and generally an unsafe environment for the employed class.

The research conducted by Griep et al. (2014) and Mago (2014) failed to take into account the social consequences of violence arising from unemployment and the psychological impact it has on the employed.

Studies conducted by Cheung and Lucas (2016) found that there was a significant reduction in the level of subjective well-being on households with lower income than that of their neighbours as a result of social comparison. In regions with a high dependency ratio, employed individuals are placed under immense pressure to ensure that their family are maintained and sustained through the tough economic conditions resulting in mental and emotional stress on the employed person (Leibbrandt et al., 2010).

2.3.2 Psychological consequences of unemployment on the employed

2.3.2.1 Wellbeing and quality of life

The current unemployment economic crisis South Africa is facing has negatively impacted on many people in the country (Africa, 2017a). Limited employment opportunities arising from stagnant economic growth has reduced the career growth potential of employees and slowed down skills development. This is detrimental to foundational level employee's overall social standing as these people cannot improve their financial standing in society, which further increases the inequalities and financial constraints endured by these group of employed individuals (Holzer, 2012).

Unemployment has a long lasting psychological impact on an individual's life even before the individual experiences unemployment. The evidence presented by Powdthavee (2012) has shown that unemployment is not gender bias and it affects both men and women. Employed individuals that experienced unemployment have indicated experiencing a significant decrease in financial wellness and life satisfaction.

Unemployment has undesirable consequences on the wellbeing of individuals when compared to other life changing experiences such as divorce, marriage, and children. Adaptation to life events have different effects to a person's wellbeing depending on the circumstances. There is a direct correlation with employed individuals fearing unemployment due to previous unemployment experiences. Hence the probability of becoming unemployed in the future adversely affects current wellbeing and life satisfaction of employed individuals (Hetschko, 2014).

2.3.2.2 Employability and employment situation

The high unemployment rate South Africa is currently facing can be seen to have two implications pertaining to the wellbeing of workers. Firstly, high unemployment rate signal that employment is becoming scarce, thereby increasing fears of job security. Secondly, employed people experience guilt of having work when considering their family members and friends who have lost their jobs (Geishecker, 2012).

The relationship of mental stress to strain of an individual has two important determinants i.e. the individual's current wellbeing and their ability to cope with the changes to their environmental factors. The employment crisis can be considered by an employed individual as a stress factor having the potential of negatively impacting on their employment. This can manifest in undesirable emotions contributing to anxiety or worries. Employees that encounter low employability may find that they have a restricted ability to adapt to dangers which impacts on the individual's occupation, bringing about mental stress. This arises as a result of the high unemployment rate that is more hindering to the degree that employed individuals see themselves to have less outside work alternatives should their employment be adversely affected (De Cuyper, Mäkikangas, Kinnunen, Mauno and Witte, 2012).

2.3.2.3 Unemployment effects on self-confidence

The macroeconomic barrier shapes the perception of people experiencing financial distress seeking employment opportunities. These individuals who are in financial distress and have unfavourable experiences obtaining employment in regions with high unemployment have a low level of self-confidence (Dahling, Melloy and Thompson, 2013). McIntyre, Mattingly, Lewandowski Jr and Simpson (2014) found that employed individuals that lose a self-expanding job have a low self-worth and self-concept lucidity.

These individual's low self-worth negatively impacts on their social relationship, and has detrimental effects on their partner's mental wellbeing and self-confidence.

According to Ajufo (2013), youth unemployment has severe consequences to the general public from an economic and psychological perspective. Unemployed youth have a lower level of self-worth, loss of self-confidence and tend to resort to crime to sustain their life style. This negatively impacts on the employed as well as the unemployed members of society. In Choi and Lee's (2013) study that investigated the link amongst youth unemployment anxiety, strain and other attributes such as mental health and self-confidence found female youth were more susceptible to stress arising from unemployment leading to a lack of self-confidence in preparation for employment when compared to their male counterparts, who appeared to experience a lower level of unemployment stress, self-confidence and satisfaction in preparation for employment.

2.3.2.4 Unemployment effects on social life experiences

Employed individuals tend to feel a sense of sadness towards their unemployed friends and family as they experience the indirect financial distress that their friend and family experience due to unemployment. Unemployment significantly reduces an individual's wellbeing (Binder and Coad, 2015). This can have a negative effect on the wellbeing of close friends and family due to the crossover effect (Skinner and Ichii, 2015). Quintel (2017) suggest that empathy towards another person's emotional state and feeling what they are experiencing can be attributed to mirror neuron. The emotional stress of unemployment of a close friend and family would indirectly affect the mental state of their employed family members and or friend via the mirror neuron effect.

Supplementary studies conducted by Sharone and Vasquez (2017) found that long term unemployed individuals tend to devalue their life and place blame on themselves for being stigmatized as unemployed. This negative attitude affects all aspects of their social life and has undesirable effects on their friends and family. Further investigations by Kunze and Suppa (2017a) revealed that unemployment negatively impacts on a person's ability to participate socially. The negative effect of social participation of unemployed people has a ripple effect on the social participation of their employed friends and families.

2.3.2.5 Unemployment effects on relationships

Employed individuals can experience guilt for having jobs while their partners are unemployed. This guilt can negatively impact on the employed person's mental state and

be damaging to his work performance. Studies undertaken by Luhmann, Weiss, Hosoya and Eid (2014) that focused on the effects of unemployment and how it affects the life satisfaction of couples, found a direct relationship between mental stress, anxiety and worries on the employed spouse due to guilt of having a job coupled with the responsibility of being the sole provider when the other partner has lost his or her job. The employed partner suffered a noticeable decrease in life satisfaction and reacted negatively if their significant other lost their job and the couple had children. This study further found that employed females were less depressed when their male counterpart lost their jobs, in contrast to employed males when their female partners experienced job loss. The notion that unemployment can cause negative experiences that changes in life satisfaction on employed people is also supported by the study conducted by Geishecker (2012).

In Grady's (2017) study, which investigated how the job loss of one partner impacted the rest of the other family members within heterosexual individuals found that the job loss of the husband adversely impacted the wife's mental state, while the job loss of the wife negatively affected the husband's physical health. Furthermore, the study inferred that elevated levels of unemployment were found to attenuate the problem because of less stigmatization associated with being unemployed.

Families with both partners employed experience social suffering when one partner become unemployed due to their company streamlining, downsizing, or restructuring. The consequence of the restructuring is detrimental to the mental wellbeing, social participation and quality of life of the sole provider in the family (Anchustigui, 2016). The effect of the social distress due to restructuring can have a ripple effect on the employed person's cognitive functions.

2.3.3 Stress, anxiety, and depression levels of the employed due to unemployment

2.3.3.1 Breadwinner's stress, anxiety, and depression levels

Leibbrandt et al. (2010) study revealed that a large population of unemployed individuals in South Africa live in homes where one individual is working. This concurred with Mathebula et al. (2017) study that focused on household income diversification in South Africa and found a raising level of households with a single income stream. Moreover, mounting income disparity within the formally employed has brought about a circumstance in which there has been diminishing income from family members that are

working in foundational level jobs due to the prohibitive cost of living. There is roughly one-fifth of working individuals that are living in poverty in South Africa (Cichello and Rogan, 2016). Given the large percentage of unemployment and the poor working class in these regions, there has been excessive strain on the employed people to sustain their unemployed dependent family members, negatively impacting on their wellbeing (Rogan and Reynolds, 2015).

Traditionally the head of the household and breadwinner's responsibility fell squarely on the shoulders of the husband. The man was required to provide for the family's needs through some form of employment. While the wife, traditionally if employed, would earn a substantially smaller supplementary income, her primary function was to provide maternal care for the children and to manage the household (Meuleman, Kraaykamp and Verbakel, 2017). This norm in roles of married men and women has since changed, given the current economic conditions. Women are becoming more financially independent and hence are moving away from the house-wife traditional role. Men are finding themselves out of jobs given the current economic crisis in which companies start to implement streamlining and restructuring strategies to minimize cost during tough economic conditions. These unemployed men are becoming dependent on their female partners for financial sustainability (Dotti Sani, 2017). This in turn places significant burden of responsibility on the female partner causing mental strain, anxiety, depression, etc.

Studies by Lenze and Klasen (2017) have indicated that a substantial number of men who depend financially on their wives tend to feel inadequate in terms of their traditional role as the financial supporter of the family. These men have a propensity of being physically and verbally abusive to their employed wife as opposed to men that are financial independent. Further analysis has publicised that some men adopted an abusive tendency to their employed female partners as a mechanism to gain control over their female partner (Alonso-Borrego and Carrasco, 2017). This abusive observation was not isolated to any particular income group i.e. low, middle, or upper socio-economic class. It was hypothesised that the increase use of violence was a way in which the husband sought to gain control, compliance, or obedience from his wife as a means of bringing about a sense of superiority over her (Lenze and Klasen, 2017). The unemployment of the husband contributing to emotional distress to the employed wife due to verbal abuse was attributed to the heightened risk of divorce and marital discord.

Women who find themselves as being the sole provider in the relationship have reported to display a greater sense of resentment to their unemployed partners as they have to pay more attention to their husband sense of insecurities, lack of financial support, and guilt of not having ample time to spend with their children (Chesley, 2016). This has caused more tension, frustration, and emotional stress on the couple's relationship.

Financial burdens experienced in a home where the employed individual cannot meet the family's financial obligations creates a negative atmosphere at home especially when couples argue, and the children witness the argument. This can have a negative impact on the children's ability to deal with their own financial security and their perception of money. Budescu and Taylor's (2013) finding suggests that children feel the burden of the family's financial strain and hence they resort to delinquency and neglect their academic work. Parents undergoing financial stress, anxiety and depression pay less attention to their children's social behaviour and academic performance (Ponnet, Wouters, Goedemé and Mortelmans, 2016). Parental distress experience during high unemployment levels is detrimental to the emotional wellbeing of their children and impacts on relationships between children and parents (Frasquilho, de Matos, Marques, Neville, Gaspar, Caldas-de-Almeida, de Matos, Neville and Caldas-de-Almeida, 2016).

In situations where the man of the house is unemployed and does not have a co-shared obligation to contribute towards the family's maintenance, while the wife takes on the sole financial responsibility, results in the children deriving incorrect assumptions about employment, finances and privileges arising from money related issues in their family (van der Lippe, Treas and Norbutas, 2017).

Many people consider unemployment as the biggest stressful events in their lives, given that unemployment is directly associated with loss of earning, difficulty in one's own financial sustainability, poor mental wellbeing, followed by the thought of never finding employment (Scholte, van den Berg, Lindeboom and Deeg, 2017).

According to Sumner and Gallagher (2017), unemployment is directly related to an increase in cortisol levels, also known as a stress hormone in an individual, which impacts on the overall health of the individual. Having one's life partner end up plainly unemployed is considered to being one of the most stressful life changing events amongst others such as a new born baby and death. Probably, since the employed companion has now taken

the role as sole-financial provider, alongside work commitment and family social participation, which further heightened stress levels endured by the employed partner. Employed men whose wives are victims of unemployment have the tendency to emotionally withdraw from the social partnership interaction as opposed to employed women who become argumentative due to their husbands being jobless. Couples described their married life as being unfulfilling because of unemployment. Employed women display anger tendencies to their unemployed husbands after a frustrating day at work. In contrast to employed women's anger tendencies to their unemployed husbands, employed men had lessened their irate behaviour to their employed wives after a taxing day at work. The stresses experienced during unemployment negatively impacted both the unemployed and the employed partners on a daily basis in varying degrees depending on their life events (Song et al., 2011).

Further studies conducted by De Witte, Pienaar and De Cuyper (2016) have shown similar results where couples become unsatisfied with their partners. Stress, anxiety and depression occurring from job loss does not only affect the unemployed individual but affects everyone associated with the unemployed individual. Husbands and wives share a common psychological link when it comes to unemployment. Daily stresses coupled with the effects of unemployment in partnerships was found to have heightened the overall stress levels of both spouses. Furthermore, spousal behavioural dynamics relating to every day minor problems have influenced the overall crossover effects in both partner's lives.

2.3.3.2 Poor economic outlook and its impact on the employed stress, anxiety, and depression

Macro-economic unemployment conditions play a key role amongst employed people. Low perception of employment opportunities and poor economic conditions were directly associated with negative employment wellbeing and psychological anguish. Employed individuals suffer mental stress and anxiety fearing poor economic condition coupled with a perceived high unemployment rate contributing to poor mental health and life dissatisfaction. This results concurs with current stress theories that suggest that external environmental conditions are determining factors of mental stress and employment dissatisfaction (Giorgi et al., 2015).

Research undertaken by De Witte, Rothmann and Jackson (2012) investigating the effects of previously unemployed individuals in the North-West province of South Africa have described unemployment as being a very stressful experience mentally, financially and physically, and associated unemployment with fatigue, depression, future uncertainty, worries about money related issues, void, and mental frustration. Ninety-six percent of the participants view employment as extremely important as it provided a sense of self-worth.

2.3.3.3 Dependent's tertiary education and financial stress

Employed household with a combined income above R120 000 and below R600 000 in South Africa do not qualify for government financial aid towards their children's tertiary education in the form of loans/bursaries and hence are categorised as the "missing middle" (Tjønneland, 2017). These employed individual's children are negatively impacted when it comes to tertiary education as they fall between the so called "missing middle". This aggravates the problem further as their children cannot attend tertiary institution due to financial constraints. This puts immense financial stress on the employed parents in these households fearing about their children's education (James, 2014).

2.3.4 Morale of the employed considering the unemployment rate

2.3.4.1 Unemployment rate and morale

Unemployment is one of the major problems South Africa is facing with around 27.7% of the work force being unemployed according to the narrow definition of unemployment (Africa, 2017a). With such an alarming unemployment rate, the issue of poverty amongst the employed in SA has taken a backseat. However, the problems plaguing many South Africans in the labour force are inequality and poverty. This necessitates the need to focus on what can be done to alleviate poverty and inequality within labour markets (Rogan and Reynolds, 2015). Research has shown that given the large unemployment rate in areas, many employed people earning a sub minimum wage are demoralised to find greener pastures, fearing unemployment (Ardington et al., 2015).

Employed individual's morale is low in areas with high unemployment rates. This has resulted in a subtle difference in the emotional state amongst these people. This can be attributed to greater levels of despair amongst the employed in areas with high unemployment rates, creating a higher perception of employment insecurity (Dixon et al.,

2013), feelings of blame, greater workload in receding work sectors and scarcer job alternatives for the employed (Benach et al., 2014). Depression can hinder an individual's ability to perform adequately at work (Wagner, Ghosh-Dastidar, Robinson, Ngo, Glick, Musisi and Akena, 2017).

2.3.4.2 Work performance and productivity

At the workplace, people's interaction with their co-workers is unavoidable and hence, psychological wellbeing is essential to ensure a positive work environment which will facilitate in creating productive employees (Laschinger and Read, 2017). The psychological welfare of employees at work is affected by job strain. Job strain could be characterised as the decrease in work performance due to lack of control (Anthony-McMann et al., 2017). Follis's (2014) research which examined the perceptions of stress in conjunction with the morale of employees, have revealed that both genders experience similar stressors in the workplace that is detrimental to the employee's morale but each gender deals with the associated stresses in varying ways. This finding concurs with the work of Anthony-McMann et al. (2017).

Pérez-Eisenbarth (2014) argues that unemployment can be used as a mechanism to discipline employees to improve productivity. However, the research does not factor the psychological distress and adverse impact that unemployment used as a discipline tool has on employees' morale and their quality of life. Erdogan et al. (2012) has shown that life satisfaction is directly proportional to employee's performance at work. The stress, anxiety and depression brought about by an unemployed family member or friend on an employed individual can negatively impact on the individual's cognitive state (Brand, 2015).

2.3.4.3 Unemployed partners impact on employed morale

Unemployment of a partner can be mentally and financially straining on an employed person's relationship. Unemployment experienced in a relationship due to one individual in the relationship becoming unemployed can have devastating consequences on the mental wellbeing of the employed individual in the relationship (Baranowska-Rataj and Strandh, 2017). Employees undergoing mental stress and financial worries are less productive at work due to lack of focus (Mwangi, Boinett, Tumwet and Bowen, 2017). The mental stress experienced by an employed person transcends into the work environment which negatively impacts on the morale of the employed individual at work. Morale is

directly related to employee productivity (Shaban, Al-Zubi, Ali and Alqotaish, 2017). Therefore, low employee morale will be detrimental to a company's competitive advantage in its operating environment.

2.3.4.4 Job insecurity

Unemployment as an economic crisis is detrimental to the mental and social wellbeing of all employees, their friend, family, and society at large, given the current elevated unemployment rate coupled with the recession that South Africa is experiencing (Africa, 2017a). Many companies are closing, streamlining, downsizing which ultimately results in more job losses. These circumstances amplify work-related anxiety and strain experienced by employees. Bosmans, Lewchuk, De Cuyper, Hardonk, Van Aerden and Vanroelen (2017) suggest that work strain comprises of job insecurity and work relationship exertion are without a doubt a solid indicator of poor physiological and mental wellbeing when combined with poor social support from friends and family. Employment uncertainty can have serious psychological consequences such as stress, anxiety, violent behaviour and depression on the individual, his family and friend's social lives. In some cases, employment uncertainty can also lead to the person experiencing employment uncertainty to commit suicide (Forastieri, 2013). Unemployment can result in demoralisation within employees due to associated psychological consequences experienced.

Unemployment can have a long-lasting effect on employee's mental wellbeing. Individuals that have been victims of unemployment and have subsequently found re-employment, still suffer from a decline in mental wellbeing, physical wellbeing, overall income, social participation, and overall family wellbeing. Even though re-employment reduces the mental effect of unemployment, it does not eliminate the stresses, anxiety, and depression experienced from previous unemployment. The previous experiences associated with unemployment adversely affects the morale of re-employed individuals in their workplace due to fears of job uncertainty (Brand, 2015). According to Mosca and Bordelon (2017), employee morale deteriorates when employed individuals experience job distress due to fears associated with dismissals and employment uncertainty.

2.4 Research gaps

There are numerous studies that focused on the negative effects of unemployment on unemployed people and how it impacts their life satisfaction, but limited research that addresses the psychological impact of unemployment on the employed in their workplace and social life experiences. The issues surrounding most of the available literature is that it pertains to the effects of unemployment on unemployed persons but fails to consider the direct or indirect psychological effects that unemployment has on employed individuals, the implications of unemployment on the performance of the employed at work and the spill-over effect it has on the business cultural environment. Furthermore, there is not a wealth of research undertaken that investigates the effects of unemployment on the mental, social, and physical wellbeing of employed South Africans of various races, gender, and income streams, paving the way to understand this phenomenon and the related implications.

2.5 Summary of literature review

Most research studies differ on the interpretation of the definition for the unemployment rate in South Africa but there is a consensus amongst all academics that South Africa has one of the highest unemployment rates in comparison with other developing nations. With the majority, black youth being affected due to the high prevalence of poverty within this population demographic which could be attributed to the apartheid legacy.

Social support system has increased substantially after South Africa's first democratic election, with a huge increment of disability grants and three fifths of children with care givers receiving child support grants. Many researchers differ on the effectiveness of government's social initiative program in dealing with the alleviation of poverty in SA. Hence, there is some disparity in the results provided leading for further research in this area of studies to attain a better understanding.

The tough economic conditions South Africa is experiencing has further exacerbated the problem, by increasing the number of unemployed individuals, lessening the family wage for numerous South Africans and increasing the dependency ratio. Academic studies have shown that there are a considerable number of low income households that only have a sole source of income. Hence, the employed individuals in these households suffer immensely both emotionally, mentally, and physically; to ensure survival of their

dependants. Unemployment has an adverse effect on the social lives of the employed, from the indirect and direct impact it has on their unemployed friends and families.

Scholars have found that the morale of the employed is impacted by the high unemployment rate due to employment uncertainty. Morale is directly related to employee productivity and hence, low employee morale will be detrimental to a company's competitive advantage in its operating environment.

The theories underpinning this research study have been discussed in the theoretical review and the interaction between the dependent and independent variables associated with each hypothesis have been explored, discussed, and investigated in the empirical review. The next chapter provides the research methodology used to gather and analyse the data for this research study which would be used to test the conceptual model conceived from the literature review.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology developed and used for the study. This study adopted a cross-sectional quantitative design with positivism philosophy by utilising a structured questionnaire. The area of study, population targeted, sampling techniques used, research instrument design, validity and reliability techniques adopted at the various stages of the research design to ensure that this study is both valid and reliable are discussed in this chapter.

Next, the data collection method employed at each toll plaza in conjunction with the data analyse involving the use of descriptive statistics to observe the central tendencies are discussed. Thereafter, the inferential statistics methods employed to obtain a comprehensive understanding of the variables behaviours and relationships in terms of the conceptual framework are explained.

Ethical considerations at various stages that are employed to ensure the participant, the organisation utilised for the research, and the university are protected against ethical misconduct are conferred. The effects of biases that may impact the reliability and validity of this research study are explored, and mitigations proposed against the various biases during the different stages of this research study are described. Thereafter, the conceptual framework providing the blue print for the investigation will be unpacked. This chapter ends with a summary of the research methodology used for the study.

3.2 Research paradigm

A paradigm is a set of universal recognized rational behaviours of the investigator. Paradigms directs the methods, the research strategy and approaches that are adopted in a study (Saunders, Lewis and Thornhill, 2015). This study uses a positivist paradigm by utilising a questionnaire designed to measure and determine, firstly the degree that unemployment has on the employed mental wellbeing. Secondly whether unemployment increases the stress, anxiety, and depression level of the employed. And finally, how work morale of the employed is affect due to unemployment.

Hence, it is comprehended that responses to the research hypotheses can be unbiasedly determined, measured and found using scientific processes of exactness and precision.

In this way the research study would establish purposiveness, thoroughness, testability, and replicability (Sekaran and Bougie, 2016).

3.3 Research design

According to Sekaran and Bougie (2016), a research design is the blueprint that directs the research process for obtaining, determining, assessing and lastly converging to the elucidation of the research problem. Owing to the intricacy of the research problem for this study and the time constraints applicable to this research study, an optimal research design was opted for, which comprised of a cross-sectional quantitative design. To ensure that the questions of the research instrument would illicit the appropriate responses to effectively answer the research problem, the questionnaire was developed and crafted based on extensive research on the effects of unemployment on families, friends, and society in general, the direct and indirect impact unemployment has on the mental wellbeing of the employed and the effect job insecurity arising from unemployment has on the morale of employees. Multivariate techniques were used to determine the relationship amongst the independent variable and the dependent variables.

3.4 Study area

South Africa had an official unemployment rate of 27.7% and an expanded unemployment rate of 36.6% for the second quarter of 2017 as per the data published by Statistics South Africa (2017a). KwaZulu-Natal had an official unemployment rate of 25.8% and expanded unemployment rate of 41.0% for the second quarter of 2017 (Africa, 2017a). The KZN province had the second lowest labour force participation rate i.e. 49.3% and third lowest absorption rate i.e. 37.5% in comparison with the other nine provinces for the second quarter of 2017. Ideally, the study area would have incorporated the whole of KwaZulu-Natal province. However, due to time constraints associated with this MBA dissertation, it was not feasible to adopt the whole of KwaZulu-Natal to understand the phenomena of the psychological consequences of unemployment on the employed. Therefore, areas within KwaZulu-Natal province which had varying levels of dependency ratios and unemployment were strategically chosen i.e. KwaDukuza and uMlalazi regions of KwaZulu-Natal.

KwaDukuza region forms part of the KwaZulu-Natal province and encapsulates the oThongathi and Mvoti toll plazas. The unemployment rate in 2011 for the KwaDukuza region according to the census data was 25.0% and for the youth i.e. individuals from 15

years to 34 years, it was 30.8%. The dependency ratio was 50% for the KwaDukuza region in 2011 (Africa, 2011a).

uMlalazi region forms part of KwaZulu-Natal province and encapsulates the Mtunzini toll plaza. The official unemployment rate in 2011 for the uMlalazi region was 35.20% and for the youth i.e. individuals from 15 years to 34 years, it was 45.10%. The dependency ratio was 74.9% for the uMlalazi region in 2011 (Africa, 2011b).

The varying levels of unemployment in the KwaDukuza and uMlalazi regions was pivotal in understanding the psychological consequences unemployment has on the employed from a social norm perspective.

3.5 Target population

The number of employed people in KwaZulu-Natal as the target population was not practical for this research study due to time constraint for the completion of this dissertation. A feasible study setting was adopted to ensure that the psychological consequences associated with unemployment on the employed could be investigated without any compromises to the study. It was decided to target the employees at the oThongathi, Mvoti and Mtunzini toll plazas in order to obtain an understanding of the psychological consequences unemployment has on employed people living in areas with different unemployment rates.

The toll plazas have a diverse range of employees that could be categorised into 3 levels i.e. foundational level (Toll Collectors), midlevel (Supervisors and Admin Staff) and upper level (Managers), thereby allowing for a more comprehensive understanding of how the psychological consequences of unemployment affects employed people at various income streams. Furthermore, the plazas contain both gender groups of employees and given the findings in the literature review in sections 2.2.1, 2.3.2.5 and 2.3.3.1 that unemployment can have different effects on employed men and women. This made the target population well suited for this study.

There are 161 people employed in total by the selected toll plazas situated in KwaZulu-Natal. All 161 toll employees comprising of toll collectors, supervisors, admin, and managers were requested to participate in this study. The employed target population for the selected toll plazas situated in northern region of KwaZulu-Natal are tabulated in Table 3.1.

Table 3.1: Target population

Toll Plazas	Male	Female	Total
oThongathi	27	35	62
Mvoti	16	18	34
Mtunzini	22	43	65
Total	65	96	161

The percentage of eligible male and female participants for each toll plaza i.e. oThongathi, Mvoti and Mtunzini is graphically presented in Figure 3.1.

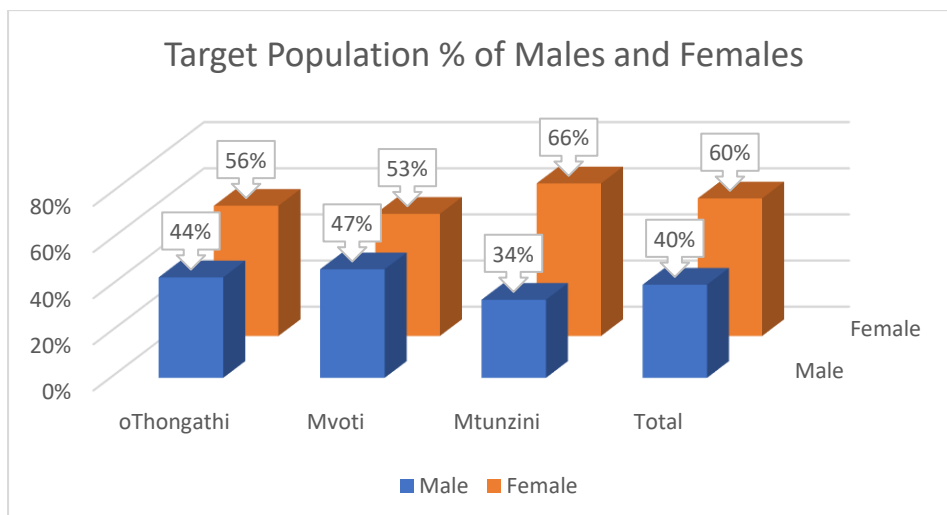


Figure 3.1: Target population % of males and females

3.6 Sampling techniques

There are 2 different types of sampling techniques i.e. probability or non-probability. This research study will utilise probability sampling as discussed in subsection 3.6.1. Additionally, the computation of a representative sample size is provided in subsection 3.6.2.

3.6.1 Probability sampling

A sample population can be considered as a representative grouping of elements from a populace used to understand the behavior of the individuals under investigation. Probability sampling ensures that all attributes of the population under investigation are

represented in the sample with a mathematical probability that the sample is a representative of the target population (Roy and Acharya, 2016).

To ensure that the sample is representative of the target population, probability sampling was utilised for this research study. According to Bruce (2015), when the population contains several unique characteristics, stratified sampling can be used to investigate the unique characteristics in the homogenous group. Stratified sampling was adopted based on the research undertaken during the literature review in chapter 2 i.e. employed people living in areas with different unemployment rates experience unemployment differently.

3.6.2 Sample size

The total target population for the study comprised of all 3 toll plaza employees amounting to 161 people. All these people were eligible to participate in the study. The target population was divided into the two regions with different unemployment rate i.e. oThongathi and Mvoti which formed part of the KwaDukuza region and Mtunzini which formed part of the uMlalazi region (refer to Section 3.4 for more information pertaining to the unemployment rate for the KwaDukuza region and uMlalazi region).

The sample size for the KwaDukuza region stratum was calculated based on the total population of 96 people employed at the oThongathi and Mvoti Toll Plazas to achieve a 99% confidence level with a 5% error margin as follows:

KwaDukuza region stratum calculation for sample size (Black, 2009):

$$Sample\ Size = \frac{(D\ \%)}{\left(\frac{(ME)\%}{CLS}\right)^2}$$

Where D represents a 50% distribution, ME is the margin of error and CLS is the confidence level score.

$$Sample\ Size = \frac{(0.5 (1 - 0.5))}{\left(\frac{0.05}{2.576}\right)^2}$$

Note a confidence level of 99% has a score that equates to 2.576

$$Sample\ Size = 663.58$$

However, the true sample size for the total population of 96 employees at oThongathi and Mvoti Toll Plazas were as follows:

$$\text{True Sample} = \frac{(SS \times P)}{(SS + P - 1)}$$

Where SS represents the sample size at a 99% confidence level and P represents the total target population.

$$\text{True Sample} = \frac{(663.58 \times 96)}{(663.58 + 96 - 1)}$$

$$= 84$$

Therefore, the true sample were 84 employees for KwaDukuza region to achieve a 99% confidence level and a 5% margin of error

The sample size for the uMlalazi region stratum was calculated based on the total population of 65 people employed at Mtunzini Toll Plaza to achieve a 99% confidence level with a 5% error margin as follows:

uMlalazi region stratum calculation for sample size (Black, 2009):

$$\text{Sample Size} = \frac{(D \%) }{\left(\frac{(ME)\%}{CLS} \right)^2}$$

Where D represents a 50% distribution, ME is the margin of error and CLS is the confidence level score.

$$\text{Sample Size} = \frac{(0.5 (1 - 0.5))}{\left(\frac{0.05}{2.576} \right)^2}$$

Note: A Confidence level of 99% has a confidence level score that equates to 2.576

$$\text{Sample Size} = 663.58$$

However, the true sample size for the total population of 65 employees Mtunzini Toll Plaza was calculated as follows:

$$\text{True Sample} = \frac{(SS \times P)}{(SS + P - 1)}$$

Where SS represents the sample size at a 99% confidence level and P represents the total target population.

$$\text{True Sample} = \frac{(663.58 \times 65)}{(663.58 + 65 - 1)}$$

$$= 60$$

Therefore, the true sample were 60 employees for uMlalazi region to achieve a 99% confidence level and a 5% margin of error. Using the formulae, the sample population for each stratum were computed and are represented graphically in Figure 3.2

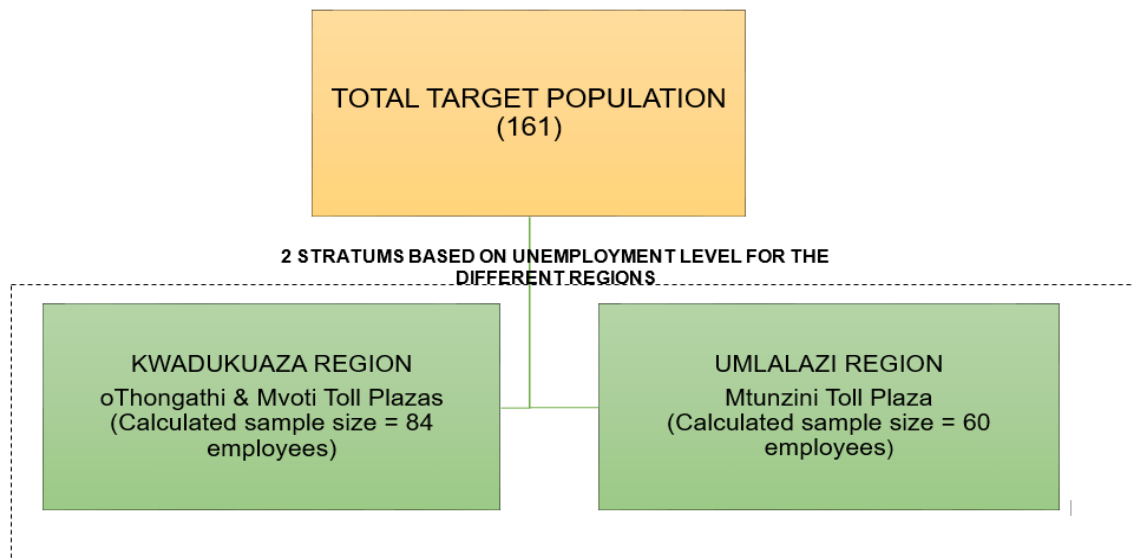


Figure 3.2: Calculated sample size for each stratum – Source Author.

3.7 Research instrument

A measurement instrument was developed based on the research undertaken during the theoretical and empirical literature review in understanding the dependent and independent variables behaviour to investigate the phenomena pertaining to the psychological consequences of unemployment on the toll plaza employees. The research instrument comprising of a questionnaire created to effectively answer the objectives of this research study.

The research instrument comprised of 34 questions with 32 questions having an ordinal scale and 2 questions having a nominal scale. According to Creswell (2014), the measurement instrument scale should be precise to measure the behavioural input that are included within the scale variables for the applicable questions of the research instrument. The ordinal scale questions were used to provide categorisation and a ranking order to measure the levels of stress, anxiety, and depression of the participants as well as to measure the impact unemployment has on the participant's mental wellbeing

and morale at work. The 2 nominal scale questions pertained to the gender and race groups of the participants and hence categorisation was only required. Twenty-eight questions out of the thirty-four questions in the questionnaire were structured using a 5 factor Likert-type scale format which contained a selection of cautiously crafted questions, selected after extensive testing, focused on eliciting reliable responses from respondents (Saunders et al., 2015).

The questionnaire used to obtain the participants responses pertaining to the impact unemployment has on their mental wellbeing, quality of life, social life, stress / anxiety / depression levels and morale at work were coded as illustrated in Table 3.2 to safe guard against biases.

Table 3.2 Research instrument questions mappings to variables

Coded Questions Variables	Mapped Question	Main Variable Link
Q12_Adverse_Social_Life_Friends_Unemployed	1.1-Q1	GENERAL
Q27_Unemployment_Rate_Negative_Wellbeing_QoL	1.2-Q2	
Q26_Anxiety_Family_Friend_Lack_Self_Confidence_Unemployed	2.1-Q1	ANXIETY
Q25_Anxiety_Family_Unemployment_Substance_Abuse	2.2-Q2	
Q23_Anxiety_Family_Job_Satisfaction	2.3-Q3	
Q13_Anxiety_Provide_Education_Family	2.4-Q4	
Q11_Anxiety_Family_Future_Sustainability	2.5-Q5	
^a Q17_Anxiety_Family_Future_Employment	2.6-Q6	
^a Q4_Anxiety_Family_Employment	2.7-Q6	
^a Q6_Anxiety_Family_Future_Employment	2.8-Q6	
Q16_Depression_Sympathy_Sadness_For_Unemployed	3.1-Q1	DEPRESSION
Q9_Depression_SelfConfidence_No_Control_Employment	3.2-Q2	
Q2_Depression_Family_Unemployment	3.3-Q3	
^b Q7_Depression_Limited_Employment	3.4-Q4	
^b Q24_Depression_Limited_Employment	3.5-Q5	
Q18_Depression_Jobloss_Homeless	3.6-Q5	
Q15_Financial_Stress_Anger_Unemployed_Partner	4.1-Q1	STRESS

°Q1_Breadwinner_Financial_Stress	4.2-Q2	
°Q14_Breadwinner_Financial_Stress	4.3-Q2	
°Q19_Sole provider_ Financial Stress	4.4-Q2	
Q8_Stress_QoL_Partner_Unemployed	4.5-Q3	
Q3_Fear_Jobloss_Decrease_Efficiency	5.1-Q1	MORALE
Q5_Fear_Jobloss_Employment_Opportunities	5.2-Q2	
Q20_Work_Forget_Problems	5.3-Q3	
Q22_Job_Satisfaction_Morale	5.4-Q4	
Q21_Partners_Unemployment_Impact_Work	5.5-Q5	
Q10_Breadwinner_Coworkers_Fear_Unemployed	5.6-Q6	
Q28_Fear_Jobloss	5.7-Q7	
^a average of 2.6, 2.7 and 2.8 relating to anxiety arising by family unemployment is represented in Q6 in Figure 4.10 ^b average of 3.4 and 3.5 pertaining to depression caused by limited employment is represented in Q5 in Figure 4.11 ^c average of 4.2, 4.3 and 4.4 relating to stress stemming from being the breadwinner is represented in Q2 in Figure 4.12		

3.8 Pretesting

Pretesting of the questionnaire was essential to identify flaws, errors, and defects in the research instrument. After constructing the preliminary research instrument, a pilot group of 5 people who did not form part of the sample population of the study, but had the characteristic of the target population i.e. employed, were approached to provide feedback on the preliminary instrument to ensure the validity and reliability pertaining to the following six criteria i.e. the length of questionnaire comparative to culture of interest, adaptations of questionnaire, familiarity of units of measure, familiarity of constructs, familiarity with questionnaire layout and the method of answering such as check boxes.

The feedback provided by the pilot group pertaining to the six criteria were used to refine and finalise the questionnaire. Thereafter, the questionnaire was checked for internal consistency using Cronbach's α assessment method. The Cronbach's α was computed to 0.93 for the pilot survey using IBM SPSS Statistics software version 24 as shown in Table 3.3. Since the calculated Cronbach's α was greater than 0.70, a value used as a benchmark to confirm a questionnaire's internal consistency, the questionnaire was considered reliable (Sekaran and Bougie, 2016).

Table 3.3 Computation of Cronbach's α for pilot group

Reliability Statistics for Pilot Group				
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Questions	N of Valid cases	% of Valid cases
0.933	0.933	1-34	5	100%

3.9 Controls to ensure validity and reliability

When the questions of the questionnaire have measures assigned to them, it becomes imperative to confirm conformity of reliability and validity of the research instrument. Reliability is crucial for a measurement research instrument but does not guarantee the validity of the instrument (Hair, Celsi, Money, Samouel and Page, 2015). Since a scale can be reliable in terms of what it measures but the measurement maybe invalid if the design is incorrect. Therefore, to ensure that the research instrument used in this study is both reliable and valid the following control measures pertaining to validity and reliability were utilised i.e.:

3.9.1 Validity

An instrument is valid in the event that it measures what it is designed to measure (Wright, O'Brien, Nimmon, Law and Mylopoulos, 2016). There were no specialised approach to assess the validity of a scale, henceforth evaluation of validity was essentially a matter of developing a fitting hypothetical connection for the relationship between the idea and the instruments, and between the idea and the different variables (Saunders et al., 2015).

This research study adopted three types of validity i.e. content, criterion, and construct. During the crafting of the questions for the research instrument, content validity was determined, to establish the degree to which the content of the questions matched up with the objectives that were being investigated.

During the sample selection stage, criterion validity was established in identifying and selecting the sample population from the target population to ensure that generalizable observations would be valid for the target population.

During the data analysis stage, construct validity was established for the assessment of the data mapping to variables which were used for analysis, to investigate the relationship between variables and the theories used to explain the behaviours observed.

3.9.2 Reliability

Reliability suggests consistency in estimation to ensure that diverse measures of equivalent ideas, or estimation rehashed after sometime should deliver the same results (Rubin and Babbie, 2016). In this study, the questionnaire was structured using a 5 factor Likert-type scale format and contained a selection of cautiously crafted questions, selected after extensive testing, focused on eliciting reliable responses from respondents.

The questionnaire was checked for internal consistency using Cronbach's α assessment method. The Cronbach's α was greater than 0.7, a value used as a benchmark to confirm a questionnaires internal consistency, the questionnaire was considered reliable (Sekaran and Bougie, 2016).

3.10 Data collection techniques

Data was collected from the participant using a self-administered questionnaire for the oThongathi, Mvoti and Mtunzini toll plazas. This method ensured that the data was collected in a timely manner as the questionnaires were collected from the participants as soon as they completed the questionnaire. The questions took the participants on average 15 minutes to complete. All the questionnaires were checked for completeness to achieve a 100% completion rate. The data from the respondents of each toll plaza where stored in separate secure boxes for the analysis process.

3.11 Data analysis

Quantitative data analysis is a methodical examination of information whereby data collected via the research instrument is transformed into arithmetical information which can be further studied. The data analysis comprises of the data coding and data presentation as described in subsections 3.11.1 and 3.11.2 respectively.

3.11.1 Data coding

Data coding involved assigning numbers to responses provided by the respondents to minimize the number of categories per a question. Coding is considered a pivotal step towards statistical data analysis. Each question was broken down into variables with the intent to simplify the data analysis (Treiman, 2014). The 5-factor rating Likert-type questions of the research instrument where coded into variables that were recognisable by the statistical software package. Thereafter, all the data collected via the research

instrument was inputted into the IBM SPSS statistics software version 24. This statistical software package was used to analyse the data of this study (Field, 2013).

The data were rearranged to ensure all the questions were placed under the correct objective that were being investigated, as the questions in the research instrument were in a random order to mitigate against bias discussed in section 3.13.

3.11.2 Data presentation

According to Sekaran and Bougie (2016), a visual representation i.e. figures; graphs and table of the data central tendencies maybe utilised to provide the investigator a general understanding of the data behaviour before a thorough data analysis is initiated.

The coded data was analysed using SPSS version 24 reliability analysis to check for internal consistency. Next, descriptive statistics were employed to get a general understanding of the central tendencies using frequency statistics function for mean, mode, median and sum. Frequency statistics were also used to understand the dispersion which included the variance, standard deviations, maximum, minimum, range and mode.

Once the preliminary data analysis was concluded, inferential statistics functions which consisted of bivariate analysis, factor analysis and correlation were used to explore and investigate other types of behaviours from the data set. The detailed data analyses and presentation are contained in chapter four.

3.12 Ethical considerations

Ethical concerns occur in every research study and surpasses the mere collection and presentation of information (Creswell, 2014). Business research ethics should be considered as a societal code of conduct which is directed by good moral, integrity and honesty in the way business research should be conducted (Zikmund, Babin, Carr and Griffin, 2013).

The following were undertaken to ensure that all the necessary ethical considerations are fulfilled for the survey (Creswell, 2014):

- a) Ethical clearance from the University of KwaZulu-Natal ethics committee was obtained on the 18 July 2017 and thereafter the study was conducted.

- b) Permission was obtained from the Operator i.e. Intertoll Africa Pty Ltd operating the oThongathi, Mvoti and Mtunzini Toll Plazas to conduct this study.
- c) All participants, before participating provided consent to take part in this research study.
- d) Participants were provided with all the relevant background information, importance, significance, and objectives of this research study via. an introductory cover letter followed by the questionnaire.
- e) Participants were notified that taking part in the study was not mandatory but voluntary and hence, participants were allowed to withdraw their participation in this research study at any time should they feel intimidated.
- f) All participants were informed that the information provided by them will be kept confidential and no contact details or personal identification information such as ID, driver license, passport etc. will be required.

Ethical consideration at every stage in this research study was mandatory to ensure that participants, the organisation used to conduct the research, and the university are protected against ethical misconduct. The building blocks of sound ethical behaviour that was adhered at every stage of the research were integrity, honesty and good moral when designing the research instrument, administering the questionnaire, analysing the data and presenting the findings.

3.13 Mitigation against bias

Bias is referred to as the tendency that averts unprejudiced consideration of research questions. Bias can be encountered during an introduction of a systematic error into the sample selection or giving preferential treatment to an outcome over another (Schmidt and Hunter, 2014). To reduce bias, the research questions were crafted and created to allow participants to disclose their undistorted feelings. However, even with a well-crafted research instrument, bias cannot be eliminated in its entirety due to the human element arising from the researcher, participants, or both.

The bias impacting the researcher and participants have been mitigated against by adopting measures described under subsections 3.13.1 and 3.13.2.

3.13.1 Researcher bias

3.13.1.1 Confirmation bias

This type of bias arises when the researcher forms an opinion, view, judgement, or hypothesis and manipulates the participants responses to validate the researchers own views. This bias occurs during the data analysis when the researches use only the data that supports their hypotheses and discards data that disproves their hypotheses (Del Vicario, Scala, Caldarelli, Stanley and Quattrociocchi, 2017). Confirmation bias is profoundly imbedded in the usual ways individuals understand and sift out data. This frequently results in the researcher focusing on a single hypothesis for a particular instant in time. To mitigate against confirmation bias, the impressions of the participants where continually re-evaluated and pre-existing expectations and theories where challenged.

3.13.1.2 Culture bias

Making assumptions on what motivates and drives other individuals through our own cultural focal point conceive cultural bias (Neelankavil, 2015). Ethnocentrism refers to the judgment of other people's culture purely by the values and ideals of the researcher's own culture standards. Cultural relativism is whereby a person's own beliefs, notions and actions should be viewed by others according to that person's culture values (Barbutto, Beenen and Tran, 2015). To reduce the effects of cultural bias, the researcher tried not to view the information from the respondents through his own cultural lens and did not make a preconceived cultural judgement.

3.13.1.3 Question-order bias

Question bias order occurs when one question influences the outcome of the next question. Participants are aware by the concepts and thoughts that are contained in the questions that influence their views, state of mind and feeling for the next question (Jackson and Greene, 2017). To minimise the effects associated with question order bias, all questions in the questionnaire that were administered to the respondents did not contain the information pertaining to the central themes of the questions tested. Additionally, all questions belonging to different central theme were randomly mixed in order to eliminate the effects of one question influencing the next.

3.13.2 Respondent bias

3.13.2.1 Social Desirability Bias

Social desirable bias arises when participants answer questions that they perceive as to what is acceptable and not what is their actual thought or feeling pertaining to the subject matter being asked in a question. Irrespective of the research design, a few respondents may provide inaccurate responses pertaining to personal circumstance and try to place themselves in a way that they want to be recognised in society (Piedmont, 2014).

To mitigate against this type of bias, the questions in the questionnaire were posed in such a way to obtain the most truthful responses from the participants by making use of indirect questions where possible and by allowing participants to retain anonymity by not filling any personal details on the questionnaire i.e. their name that can be used to link them to the questionnaire.

3.13.2.2 Habituation

Habituation bias occurs because of similarly worded questions whereby participants provide identical answers for these similarly worded questions. This occurs because paying attention and concentrating on a question require a lot more energy and cognitive computation than simply choosing the same answer for a similarly worded question given the brain autopilot capability (Stein, Leventhal and Trabasso, 2013). Many participants show signs of fatigue when they come across repetitive questions and begin to provide similar answers across several questions. To minimise the impact of habituation biases, the questions of the research instrument were randomly mixed-up to ensure that the question wording varied.

3.14 Conceptual framework

The conceptual framework was created after the synthesis of literature used to describe the phenomenon and serves as the blueprint for this study, providing the rationale of the variables relationships and interrelationships. It was developed to provide a sense of direction, facilitating in addressing the specific objectives. The framework as illustrated in Figure 3.3 is a visual representation of the interaction amongst the independent variable and dependent variables.

The Mental (M), Emotional (E), Stress (S), Anxiety (A), and Depression (D) effects experienced by the employed were identified in the literature review as dependent

variables that are impacted by unemployment (ue) the independent variable. This in turn influenced Morale (Mo) dependent variable associated with latent variables Productivity (P), Job Security (J) and the Work Environment (W).

The mental and emotional states of an employed individual is affected by the stress anxiety and depression experienced, caused by unemployment (ue) effects as depicted by the arrow from block L(SAD(ue)) directed to block P[ME(ue)] in the conceptual model. The morale of the employed is affected by their mental and emotional state that unemployment has on their lives, directly or indirectly, as can be seen by the arrow originating from block P[ME(ue)] pointing towards block Mo[PJW(ue)]

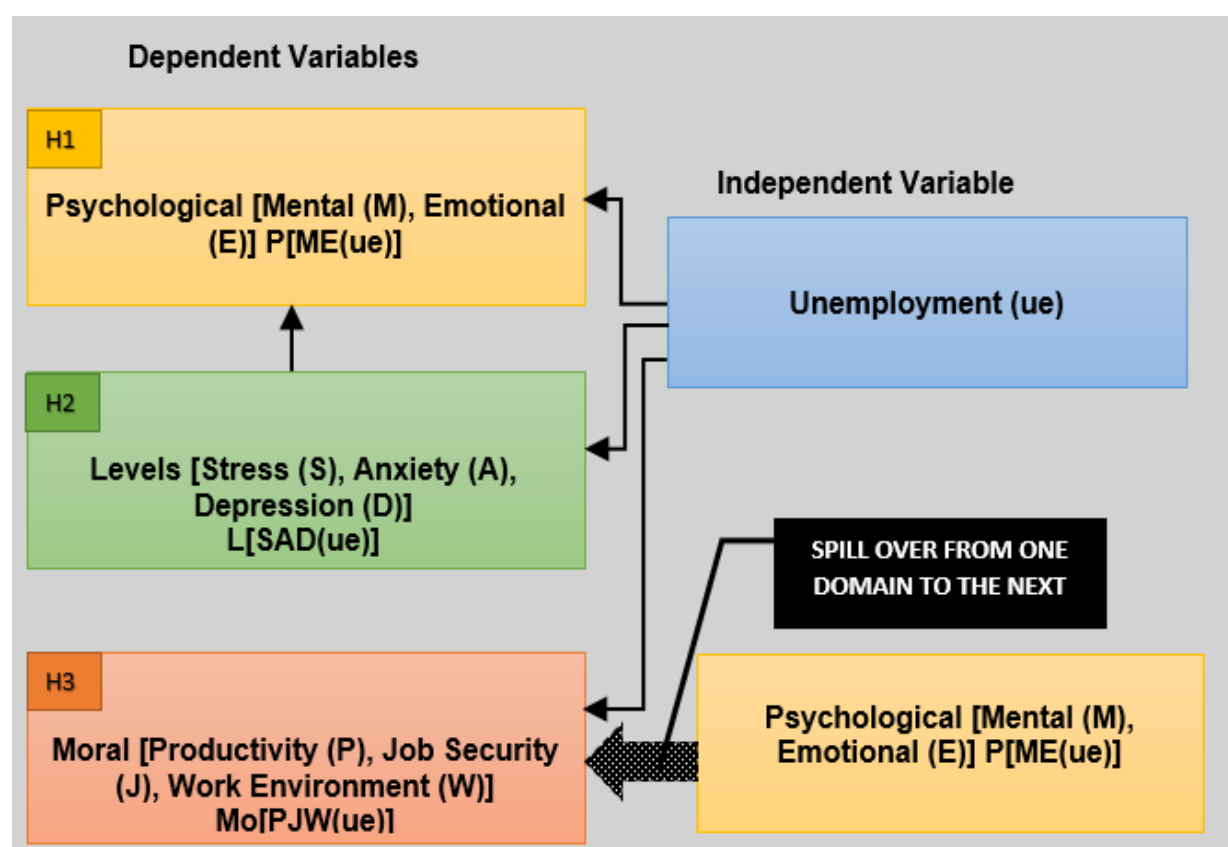


Figure 3.3: Conceptual frame showing the relationship between the independent and dependant variables – Source Author’s Conceptualisation.

Stress, anxiety and depression as depicted in the conceptual model is triggered by unemployment through direct or indirect contact with unemployed people which impacts the mental state of an employed person as conceptualised in Figure 3.4. This was identified through extensive research to derive and formulate questions to effectively test the consequences of unemployment on the mental state of the employed. The effects of

SAD caused by unemployment can be visualised as gears interlocking and driving each other, further expatiating the adverse effects on the mental wellbeing as depicted in Figure 3.4



Figure 3.4: Stress, anxiety and depression driving the mental state – Source Author's Conceptualisation.

The mental and emotional state of employed individuals that is affected by the unemployment rate has an adverse effect on the morale of the employed. This is detrimental to productivity and create job security concerns, impacting on the work environment. Figure 3.5 illustrates the combined effect that the mental and emotional state of an employed individual has on morale at the workplace.

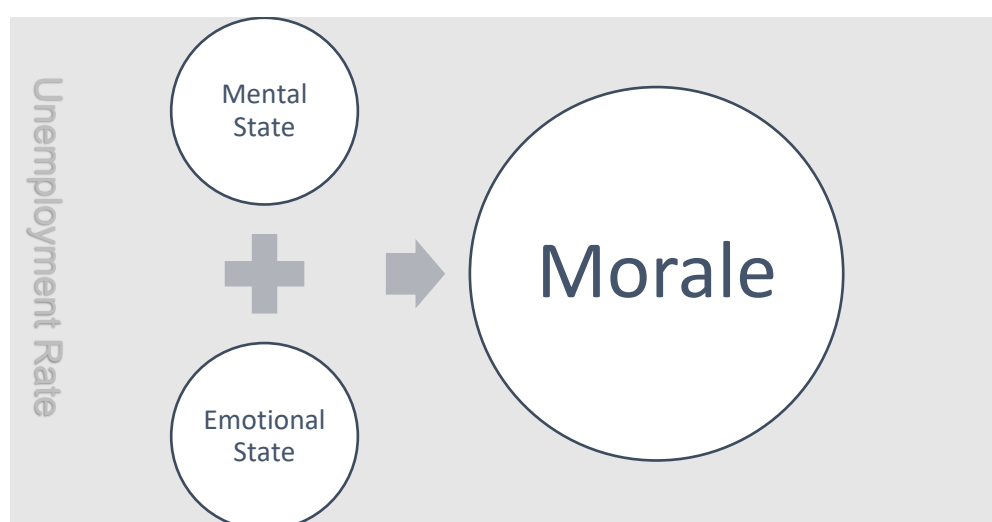


Figure 3.5: Mental state and emotional state of the employed individual impacting on morale – Source Author's Conceptualisation.

3.15 Summary of research methodology

This chapter discussed the methodology adopted for the research study. The research study adopted a cross sectional quantitative design with positivism philosophy by utilising a questionnaire type instrument. The study area chosen for this research comprised of two geographical regions located within the KwaZulu-Natal province i.e. KwaDukuza region and the uMlalazi region which was discussed in section 3.4. The two regions had varying levels of unemployment which was important in understanding the effects of unemployment from a macro perspective and the societal norms associated with unemployment with varying levels of unemployment.

The target population comprised of all toll plaza employees on the N2 North toll plazas, further information pertaining to the target population was discussed in section 3.5. Stratified probability sampling techniques were utilised to identify the most appropriate representative sample size which was explained in section 3.6.

A measurement instrument described in Section 3.7 was developed based on the research undertaken during the theoretical and empirical literature review in understanding the dependent and independent variables behaviours used to investigate the phenomena of this research study. Pretesting of the questionnaire was essential to identify flaws, errors, and defects in the research instrument which was discussed in section 3.8.

Ethical consideration at the various stages, described in section 3.12, was employed in this research study to ensure that participants, the organisation utilised for the research, and the university were protected against ethical misconduct. Validity and reliability techniques adopted at the various stages of this research design to ensure that this study was both valid and reliable are explained in section 3.9. The effects of biases that could impact the reliability and validity of the research together with the mitigations against the various biases during the various stages of this research study are explained in section 3.13

Data was collected from the participants using a self-administered questionnaire at each toll plaza which was discussed in section 3.10. Thereafter, the data was inputted into a statistical software package and analysed to firstly observe the central tendencies using descriptive statistics, thereafter, inferential statistics methods were further employed to

provide a detailed understanding of the variables behaviours as discussed in section 3.11 and the variable relationship in terms of the conceptual framework which was discussed in section 3.14.

The data analysis and presentation consisting of tables, figures and graphs demonstrating the linkage between the theoretical literature and data collected for this research study will be presented and explained in the next chapter.

CHAPTER 4: DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The data was analysed using descriptive and inferential statistic techniques, with the use of IBM SPSS version 24 together with Microsoft Excel. The analysed data is presented using tables, figures, graphs with narratives in this chapter. The research study was aimed to investigate the psychological consequences of unemployment on the employed in the KwaZulu-Natal northern region toll industry and the impact it has on employee morale.

This study examined the psychological consequence of unemployment on the employed in a region with a low level of unemployment and in a region with an elevated level of unemployment. The methodology employed was used to gather data for the two regions with low and elevated levels of unemployment were discussed in chapter 3. Hence, the data analysis conducted and presented in this chapter are done for the region with a low level of unemployment i.e. the KwaDukuza region followed by the region with an elevated level of unemployment i.e. the uMlalazi region.

The observations that are made from the empirical methods are discussed under each of the main hypotheses in this chapter. Section 4.2 provides the participants statistics, Section 4.3 examines the reliability of the data gathered, section 4.4 and 4.5 provides the reader with the descriptive and inferential statistical analysis respectively. The outcome of the analysis is generalisable to the target population of the KwaZulu-Natal toll industry northern region as probability sampling technique was employed to ensure a 99% confidence interval.

4.2 Participation statistics

The questionnaire was administered to toll employees at the oThongathi, Mvoti and Mtunzini toll plazas on the 20 July 2017 to the 30 August 2017, after full ethical clearance was granted by the UKZN ethics committee on the 18 July 2017. All toll employees were provided with the required appropriate information pertaining to the study and were informed that participation was completely voluntary. The outcome of the survey statistics pertaining to participant rate, number of participant, completion rate and approximate average completion time is provided in Table 4.1.

Table 4.1 : Survey statistics

Description	Count
Number of toll employees that were requested to take part in the study	161
OThongathi Toll Plaza*	56
Mvoti Toll Plaza*	33
Mtunzini Toll Plaza*	63
Total number of toll employees that participated	152
Number of toll employees that successfully answered all the questions in the questionnaire	147
Number of toll employee participants that did not successfully answer all the questions in the questionnaire	5
Participation rate ($152/161 \times 100$) %	94.41%
Completion rate ($147/152 \times 100$) %	96.71%
Approximate average completion time for the questionnaire	15 minutes
*Employees that participated at each toll plaza	

4.3 Reliability analysis

Reliable and valid data is essential for data collection. Reliability ensures repeatability of the outcome even if numerous iterations of the methodology are used (Sekaran and Bougie, 2016). IBM SPSS version 24 software was utilised to compute Cronbach's alpha for the twenty-eight 5-factor Likert questions to determine the reliability for each region.

The 28 Likert type questions used in this cross-sectional study employed an ordinal scale. Once all the data was captured into the data processing software, the calculated Cronbach's α_{alpha} equated to 0.980 for the KwaDukuza region toll plazas and 0.982 for the uMlalazi area toll plaza survey as depicted in Table 4.2. Since the calculated Cronbach's α_{alpha} was greater than 0.70, a value used as a benchmark to confirm a questionnaires internal consistency, the data was considered reliable (Sekaran and Bougie, 2016).

Additionally, factor reduction analysis was performed for this study, contained in the inferential statistical analysis section, produced the internal consistency information pertaining to the reliability of the research instrument utilised. The high Cronbach's alpha for both region as indicated in Table 4.2 coupled with the information contained in Tables 4.4 and 4.7 pertaining to the strong Kaiser-Meyer-Olkin measure together with the information in Table 4.5 showing the eigen value for the first factor being significantly greater than the eigen value of the subsequent factor, demonstrates that the scale items are unidimensional.

Table 4.2 Computation of Cronbach's α for survey

Reliability Statistics for KwaDukuza Region Toll Plazas				
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Questions	N of Valid cases	% of Valid cases
0.980	0.981	1-28	86	100%
Reliability Statistics for uMlalazi Region Toll Plaza				
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Questions	N of Valid cases	% of Valid cases
0.982	0.983	1-28	61	100%

4.4 Descriptive statistical analysis

The descriptive statistical analyses provide a general understanding of the central tendencies using frequency statistic function. Frequency statistics were used to understand the dispersion which included the variance, standard deviations, maximum, minimum, range and mode. Thereafter, an overall summary of the respondent's responses to the questions in the research instrument are presented in a graphical format, which forms the foundation of the quantitative data analysis.

4.4.1 Demographics

Pertinent information pertaining to the job description, education, marital status, age, gender, and race composition of the participants in this study at the KwaDukuza and uMlalazi regions of toll plazas are presented in section 4.4.1.1 and 4.4.1.2.

4.4.1.1 KwaDukuza region

Figure 4.1 provides a breakdown for the total number of participant for each job function in the toll plazas for the KwaDukuza region per gender category. From the 86

respondents that participated, 57% comprised of toll collectors, 19% comprised of supervisors, 16% comprised of administrators and 8% comprised of managers. One third of the toll collectors were males and two thirds were females with the clear majority i.e. 89.8% of toll collector belonging to the African race group, 8.2% Indians and 2% Coloured. The supervisor's and administrator's jobs comprise of more females than males with 43 % of the supervisors and administrator belonging to the African race group, 53% Indians and 3% coloureds.

In direct contrast to the ratio of males to females for the toll collector job function the manager job function comprises of 71% males and 29% females of which 43% were Africans and 57% Indians.

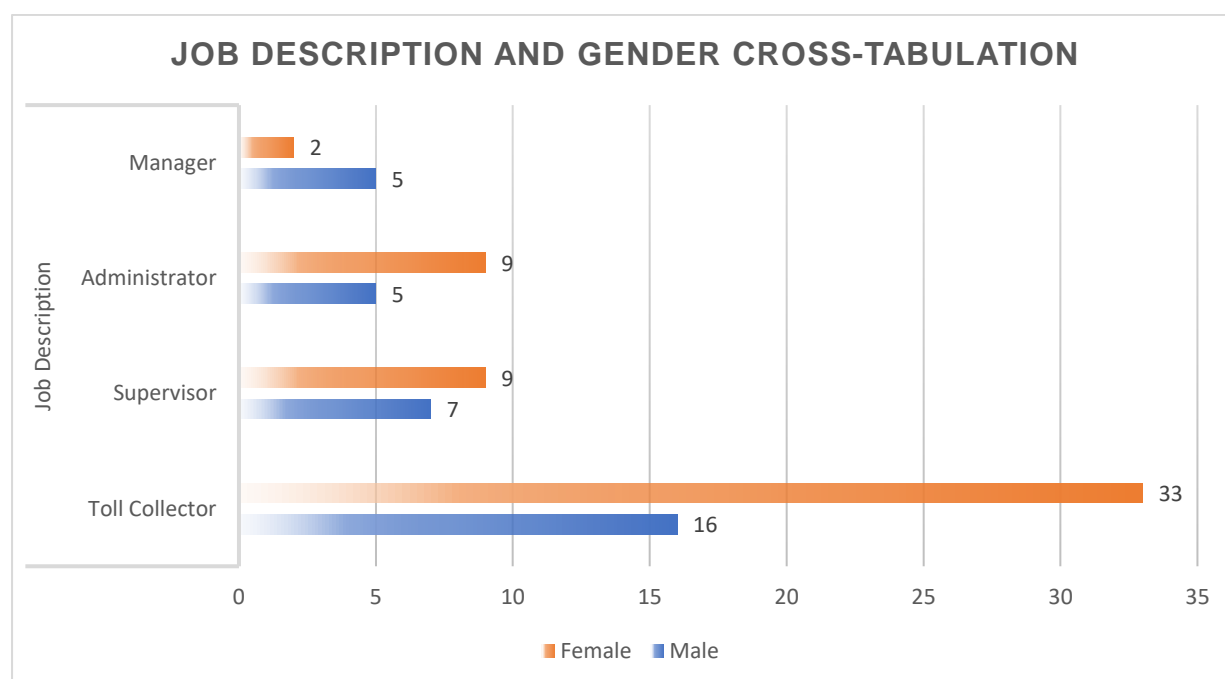


Figure 4.1: oThongathi and Mvoti toll plaza - Job description and gender cross-tabulation

Figure 4.2 depicts a cross-tabulation between education and gender for the participants at the KwaDukuza region toll plazas. Seventy percent of the sample population indicated that their highest level of education was matric of which 68% were female and 32% were male, followed by 18% with a post matric certification of which 73% were female and 27% were male, 10% with a diploma of which 89% were male and 11% were female, and 2% with a degree of which 100% were male. Participants with qualification higher than matric had job functions such as supervisors, administrators, and managers at the toll plazas.

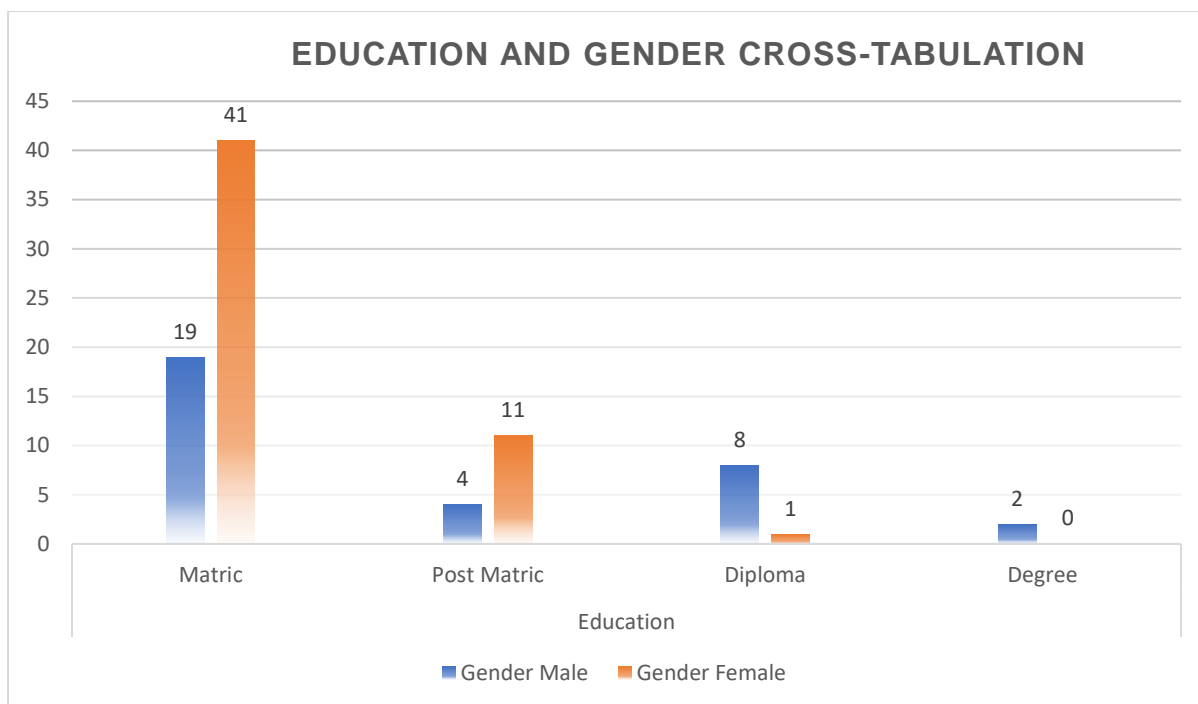


Figure 4.2: oThongathi and Mvoti toll plaza - Education and gender cross-tabulation

Figure 4.3 represents a cross tabulation between the job description and the marital status of the participants at the KwaDukuza region toll plazas. Out of the 86 respondents that participated, 23% indicated that they were single, 29% were married, 8% were divorced and 40% were cohabiting. A small proportion of toll collectors and supervisors indicated that they were divorced. Respondents holding administrator positions recorded the highest divorce rate in comparison with respondents from the other job categories. None of the managerial participants indicated that they were divorced. All job category had a high rate of respondents that were either married or cohabiting. This is crucial in understanding the crossover effects and spill-over effects of unemployment resulting from partner's unemployment experience.

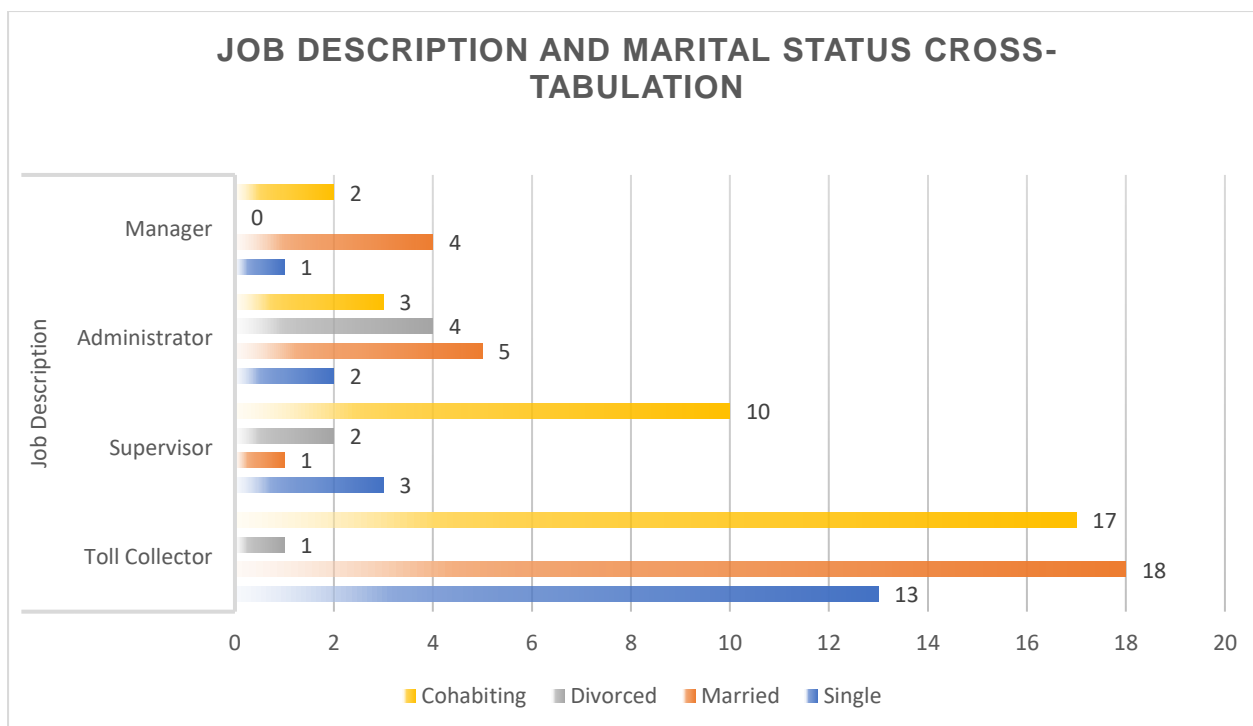


Figure 4.3: oThongathi and Mvoti toll plaza - Job description and marital status cross-tabulation

Figure 4.4 shows a cross tabulation between the age of the respondent and gender. From the 86 respondents that participated, 33% were of the 18 to 25-year age category, 29% were of the 26 to 35-year age category, 23% were of the 36 to 45-year age category, 6% were of the 46 to 55-year age category and 7% were older than 55-years of age. This highlights that majority of the toll plaza employees are between the ages of 18 to 45 years and the minority are 46 years and older.

Every age group apart from the 46 to 55-year age group were representative of the total male to female ratio of the target population as per section 3.5 target population for the oThongathi and Mvoti toll plazas. This indicates that there are fewer males between the ages of 45 to 55 years that are working at oThongathi and Mvoti toll plazas when compared to women for this same age category. Overall, the ratio of males to females that participated was 33 males (38% of the total respondents were males) to 53 females (62% of the total respondents were females).

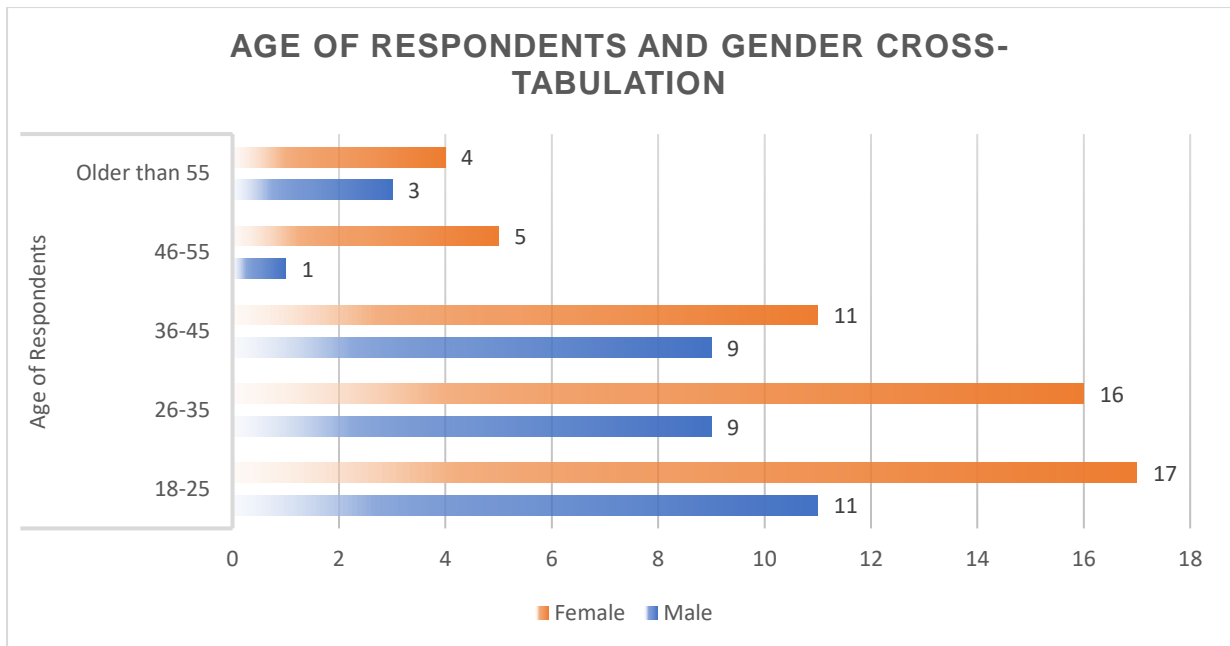


Figure 4.4: oThongathi and Mvoti toll plaza - Age of respondent and gender cross-tabulation

4.4.1.2 uMlalazi region

Figure 4.5 provides a breakdown for the total number of participant for each job function in the toll plaza for the uMlalazi region per gender category. From the 61 respondents that participated, 80% comprised of toll collectors, 11% comprised of supervisors, 5% comprised of administrators and 3% comprised of managers. Majority of the toll collectors, supervisors and administrators were female. Based on the survey data, the managers consisted solely of the male gender type. All participants at Mtunzini toll plaza belonged to the African race group.

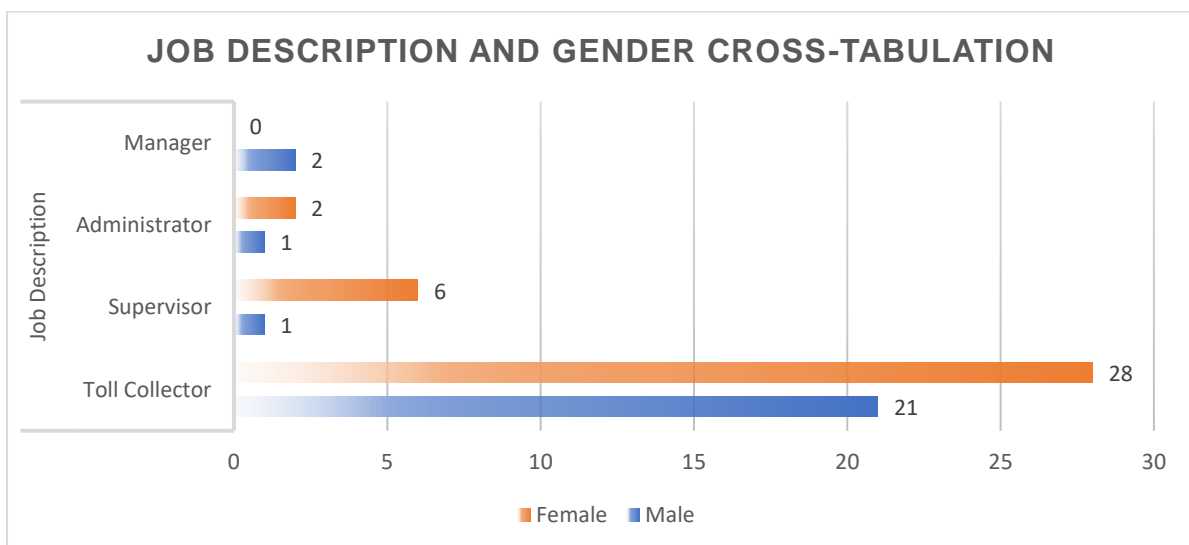


Figure 4.5: Mtunzini toll plaza - Job description and gender cross-tabulation

Figure 4.6 shows a cross-tabulation between education and gender for the participants at the uMlalazi region toll plaza. Eighty-two percent of the sample population indicated that their highest level of education was matric followed by 11% with a post matric certification, 7% with a diploma and 2% with a degree. Participants with qualification higher than matric had job functions such as supervisors, administrators, and managers at the toll plazas.

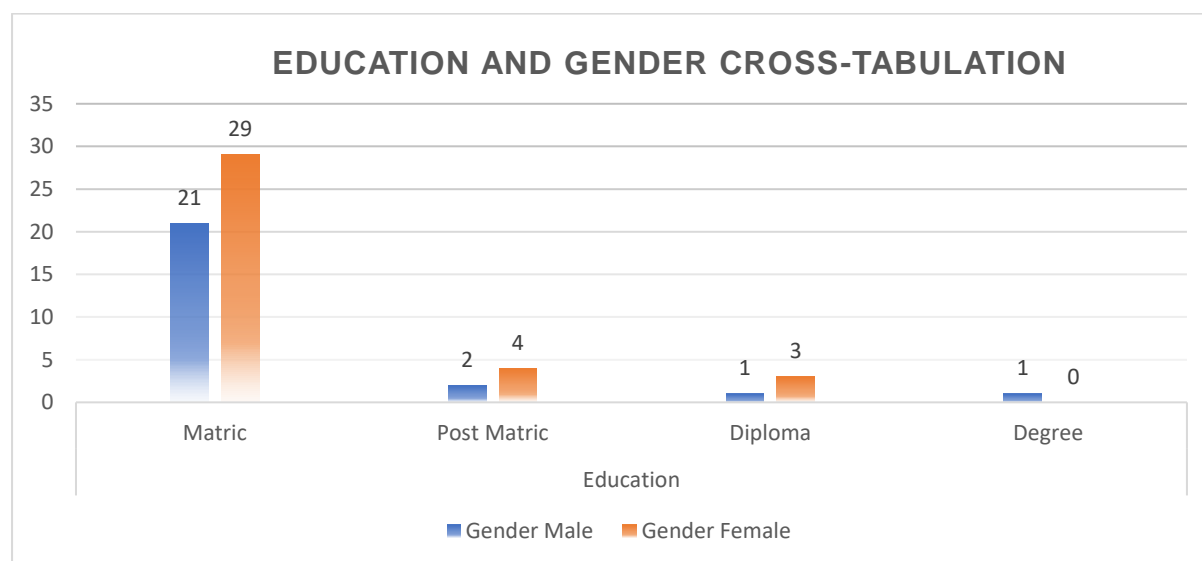


Figure 4.6: Mtunzini toll plaza - Education and gender cross-tabulation

Figure 4.7 shows a cross tabulation between the job description and the marital status of uMlalazi region toll plaza. Out of the 61 respondents that participated, 13% indicated that they were single, 26% were married, 15% were divorced and 46% were cohabiting. A small percentage of toll collectors and supervisors indicated that they were divorced. Manager respondents recorded the highest divorce rate in comparison with respondents from the other job categories. None of the administrator participants indicated that they were divorced.

All job category had a high rate of respondents that were either married or cohabiting except for administrator job category respondents which had the largest percentage of single individuals. Overall the combined percentage of married and cohabiting respondents were 72% of the total sample size. This is essential in understanding the crossover effects and spill-over effects of unemployment on the employed induced by partner's unemployment.

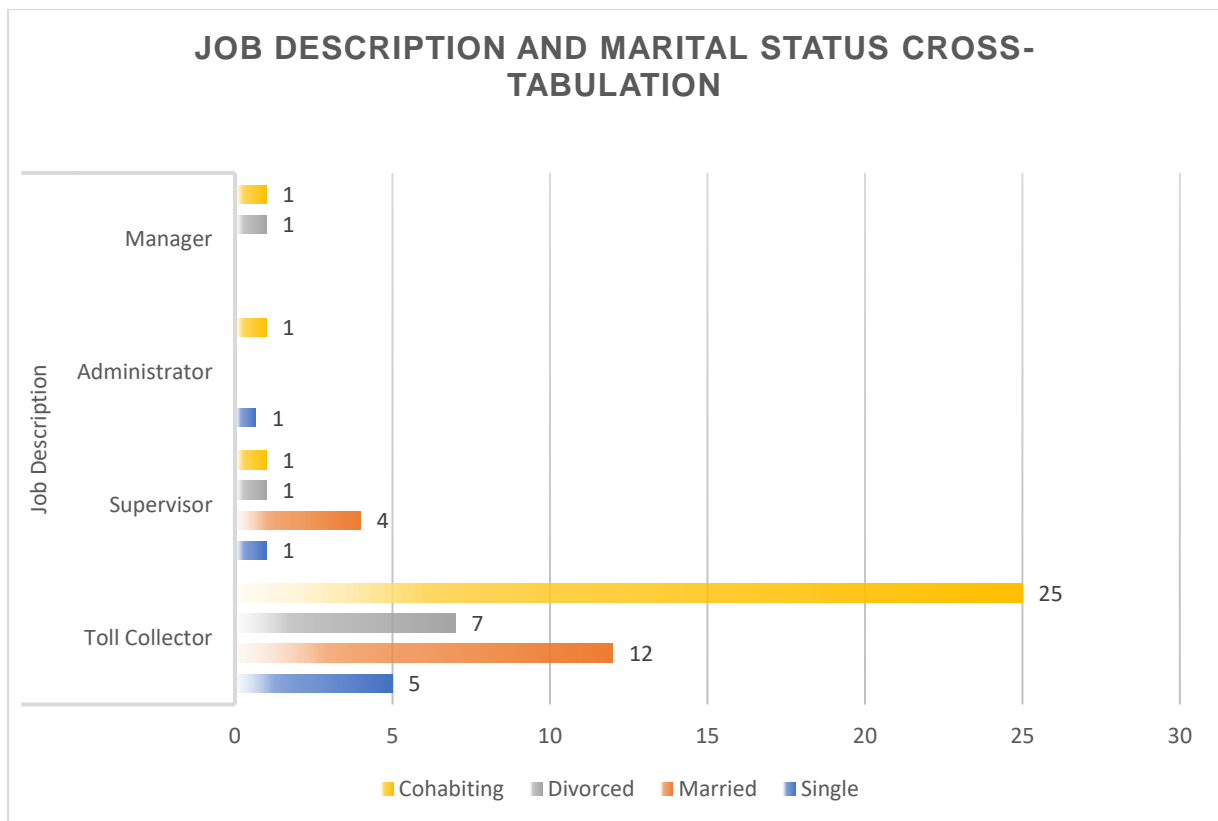


Figure 4.7: Mtunzini toll plaza - Job description and marital status cross-tabulation

Figure 4.8 shows a cross tabulation between the age of the respondent and gender. From the 61 respondents that participated, 30% were of the 18 to 25-year age category, 31% were of the 26 to 35-year age category, 16% were of the 36 to 45-year age category, 15% were of the 46 to 55-year age category and 8% were older than 55-years of age. This indicates that 77% of the toll plaza employees are between the ages of 18 to 45 years and the 23% are 46 years and older.

There seems to be the same number of male to female participants that are between the ages of 36 and 45 years at Mtunzini toll plaza. Overall, the ratio of males to females that participated was 22 males (36% of the total respondents were males) to 39 females (64% of the total respondents were females). This percentage of males to females is representative of the target population as detailed in section 3.5.

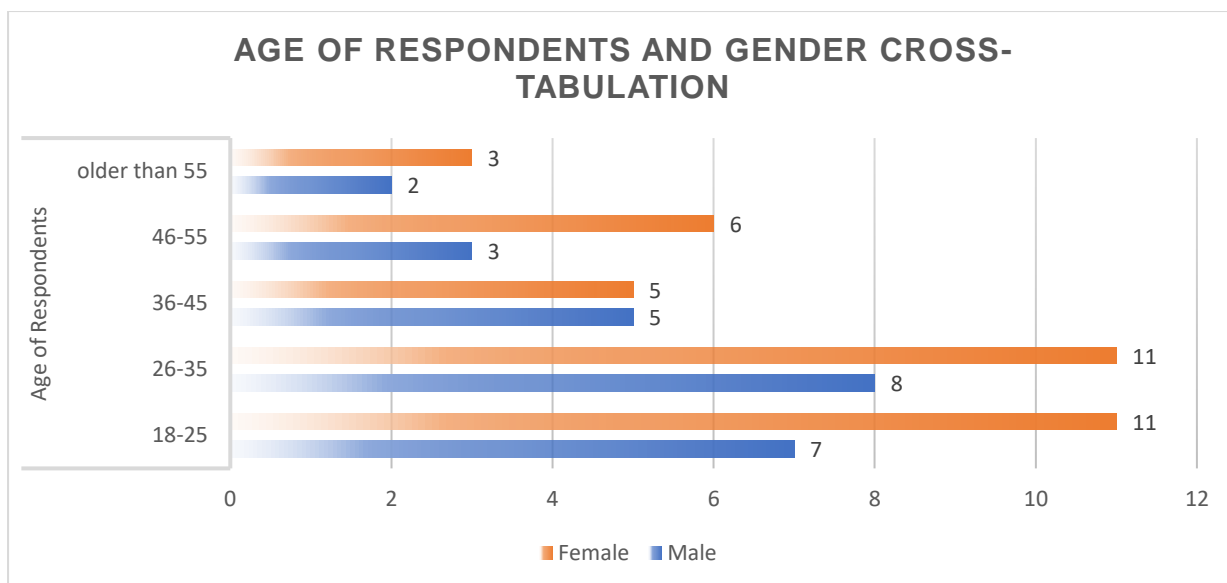


Figure 4.8: Mtunzini toll plaza - Age of respondent and gender cross-tabulation

4.4.2 Psychological consequences of unemployment on the employed and its impact on the stress, anxiety, and depression levels of the employed

This section scrutinises the effects that stress, anxiety, and depression arising from unemployment either directly or indirectly has on the mental and emotional state of the employed by probing the responses provided by the participants, examining the collective response ranging from strongly agree to strongly disagree and central tendencies.

The first two questions were asked in the survey to understand the effects unemployment has on the respondent's social life experience and overall mental wellbeing, the next eight questions were used to determine the anxiety effects of unemployment on respondents, the subsequent six questions were used to examine effect of depression on the employed respondents and the last five questions were used to investigate the stress effects of unemployment on the participants. The twenty-one questions were coded to mitigate against question order bias and habituation. The questions mappings are provided in section 3.7.

The data was analysed using descriptive statistical techniques for each region and the outcome of the analyses are presented below in sections 4.4.2.1, 4.4.2.2, 4.4.2.3, and 4.4.2.4.

4.4.2.1 Unemployment effects on social life experiences, wellbeing and quality of life

The effects unemployment has on the employed social life, mental wellbeing and overall quality of life were investigated by questions one and two respectively for both regions. The mode for question one was “Agree” (mode=2) and for question two was “Strongly Agree” (mode=1) for both regions respectively.

The actual cumulative percentages of the responses ranging from strongly agrees to strongly disagree from the survey results is illustrated in Figure 4.9.

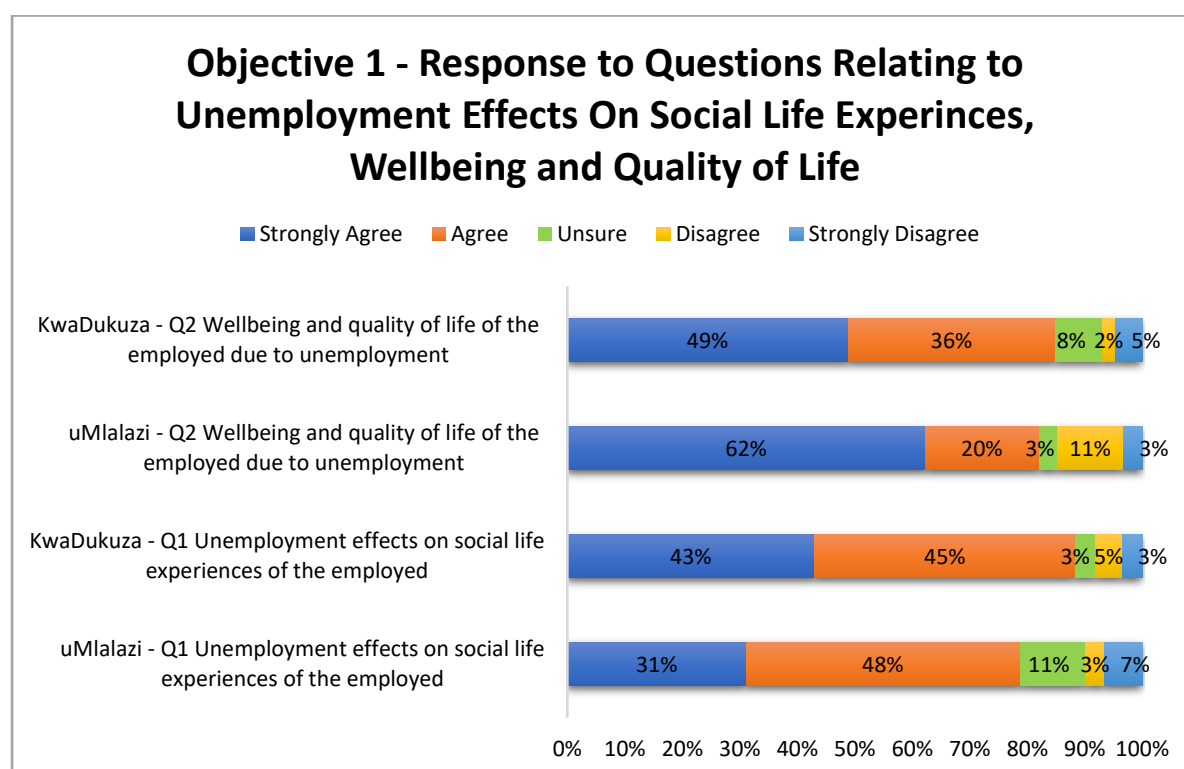


Figure 4.9: Survey questions relating to unemployment effects on social life experiences, wellbeing and quality of life of the employed

Question one examined the impact unemployment has on the employed social life experiences due to their friends being victims of unemployment. The survey showed that 88.3% of employed participants in the region with low unemployment level and 78.7% of employed respondents in the region with high unemployment level, responded that unemployment had adversely affected their social life experiences. Using crosstabulation across gender, age and education the results indicate that a greater percentage of male (84.0%) as opposed to females (75%), with majority of the respondents having matric as their highest education between the ages of 18 to 36 years in the uMlalazi region felt

unemployment adversely affected their social life experiences. For the KwaDukuza region, there was a high percentage of both gender types (88.8% males and 87.9% females) that felt unemployment had an adverse effect on their social life experience.

Question two investigated the effect unemployment has on an employed individual's mental wellbeing and quality of life. Both regions had a high percentage of respondents (85.2% for KwaDukuza and 82.0% for uMlalazi) with majority having foundational level jobs who concurred that the current unemployment negatively impacted on their mental wellbeing and quality of life. In terms of gender, male respondents (87.9% of the total male population) in KwaDukuza and female respondents (83.3% of the total female population) in uMlalazi were more susceptible to the effects unemployment had on their mental wellbeing and quality of life than their respective counter parts i.e. 83% female respondents for KwaDukuza and 80% male respondents for uMlalazi.

4.4.2.2 Anxiety experienced by the employed arising from unemployment

The effects of anxiety felt by the employed as a consequence of unemployment due to fear of unemployed family/ friend's loss of self-confidence, unemployed family members becoming substance abusers, children future job opportunity, breadwinner provision of tertiary education for children, poverty, future employment opportunities and employment sustainability were investigated through questions one to six for both regions.

The mode for the six anxiety related questions ranged between "Strongly Agree" (mode=1) and "Agree" (mode=2). The actual cumulative percentages for the responses ranging from strongly agrees to strongly disagree from the survey results is illustrated in Figure 4.10.

Objective 1 & 2 - Anxiety Questions: Responses Of Participants

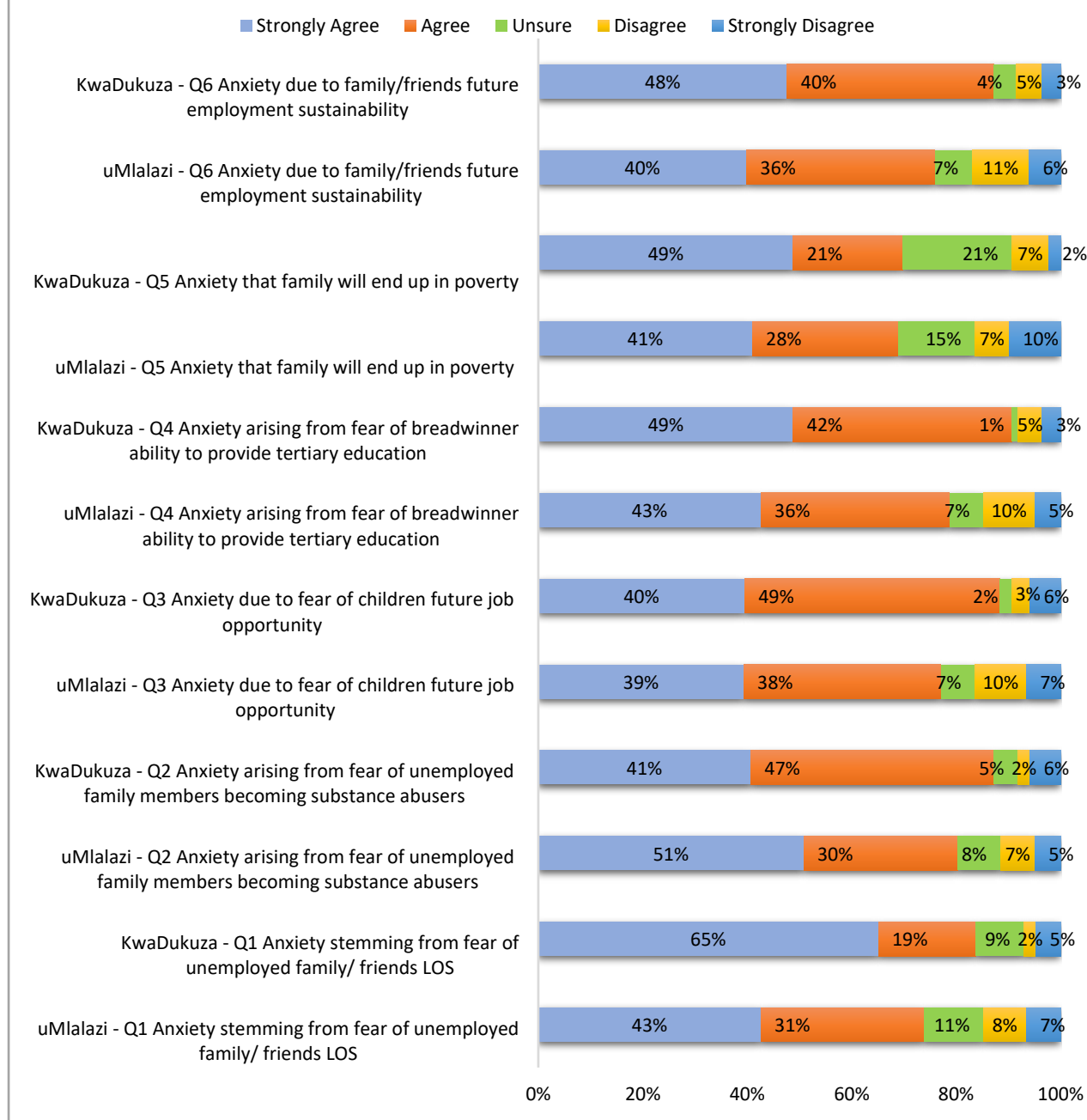


Figure 4.10: Survey questions relating to anxiety experienced by the employed due to unemployment

Question one examined the effects anxiety has on an employed individual's mental state caused by unemployed families/ friends not finding employment and subsequent loss of self-confidence. Majority of the respondents for both regions (88.7% for KwaDukuza and 73.8% for uMlalazi) responded that they feared their unemployed family/friend will lose

confidence in themselves should they not find employment. More male respondents (90.9% male respondents as opposed to 79.3% female respondents in KwaDukuza) in the region with a low unemployment rate and female respondents (77.8% female respondents as opposed to 68.0% male respondents in uMlalazi) in the region with high unemployment rate, suffered from anxiety, worrying about their unemployed family /friends.

Question two investigated the effects of anxiety brought about by fear unemployment has on an employed individual's mental state arising from unemployed family and friends resorting to alcohol or other types of substance abuse due to not finding employment. The survey data showed that a greater percentage of respondents for both region (87.2% of respondents for KwaDukuza and 82.3% of respondents for uMlalazi) indicated that they feared their unemployed family members will resort to substance abuse if they do not find a job. Further analysis revealed that a high percentage of respondents (97.0% male and 81.1% female respondents for KwaDukuza, 80.6% female and 80% male respondents for uMlalazi) across all job positions felt that their unemployed family members will resort to substance abuse due to unemployment.

Question three explored the effects of anxiety due to fear unemployment has on an employed individual's mental state arising from limited future employment opportunities; forcing their children to take the first employment opportunity that presents itself to avoid being unemployed. From the frequency analysis, the data showed that there was a significant percentage of respondents for both regions (88.3% of respondents, of which 94% from the male and 84.9% from the female total sample size for KwaDukuza and 77% of respondents, of which 80.6% from the female and 72% from the male total sample size for uMlalazi) that feared the limited job opportunities will force their children to take the first job that present itself to avoid unemployment.

Question four focused on anxiety due to the breadwinner's fear of not being able to afford to send their children to a tertiary institution as a result of financial constraints. The survey data revealed that overall the majority of respondent across all job positions in both regions (90.7% of respondents, of which 96.9% representation from the male sample size and 86.8% representation from the female sample size for KwaDukuza and 78.7% of respondents, of which 80.0% representation from the male sample size and 77.8% representation from the female sample size for uMlalazi) feared they would not be able

to provide tertiary education for their children as they barely make enough to meet the day to day expenses given their sole provider responsibility.

Question five illustrated in Figure 4.10 comprised of three survey questions which investigated anxiety arising from fear by the employed that their family members will end up in poverty as they would not be able to find work. This question was asked in three different forms in the survey questionnaire to ensure consistency in the responses from the participants and hence the results presented in Figure 4.10 is an average of the responses for the three questions in the questionnaire. The average cumulative responses showed that many respondents (70.8% of respondents for KwaDukuza, of which 85.9% represented the male respondents and 68.8% represented the female respondents; and 68.9% of respondents for uMlalazi, of which 66.7% represented the male population and 75.3% represented the female population) for both regions were fearful that their family members will end up in poverty arising from unemployment.

Question six analysed the impact of anxiety on the employed caused by worrying over family member's future capacity to earn a living given the present unemployment rate. There was a significant percentage of employed participants in both geographical areas (88.4% of respondents from KwaDukuza, of which 93.9% of the male population and 84.9% of the female population; and 76.3% of respondents from uMlalazi, of which 80% of the male population and 75% of the female population) across all age groups that felt anxious, thinking about their family member's future employment sustainability.

4.4.2.3 Depression experienced by the employed due to unemployment

The effects of depression experienced by the employed resulting from unemployment due to sympathy for the unemployed, loss of control of employment situation contributing to lack of self-confidence, limited employment opportunities, fears of job loss and displacement were investigated through questions one to five for both regions.

The mode for the five depression related questions ranged between "Strongly Agree" (mode=1) and "Agree" (mode=2). The actual cumulative percentages for the responses ranging from strongly agrees to strongly disagree from the survey data is illustrated in Figure 4.11.

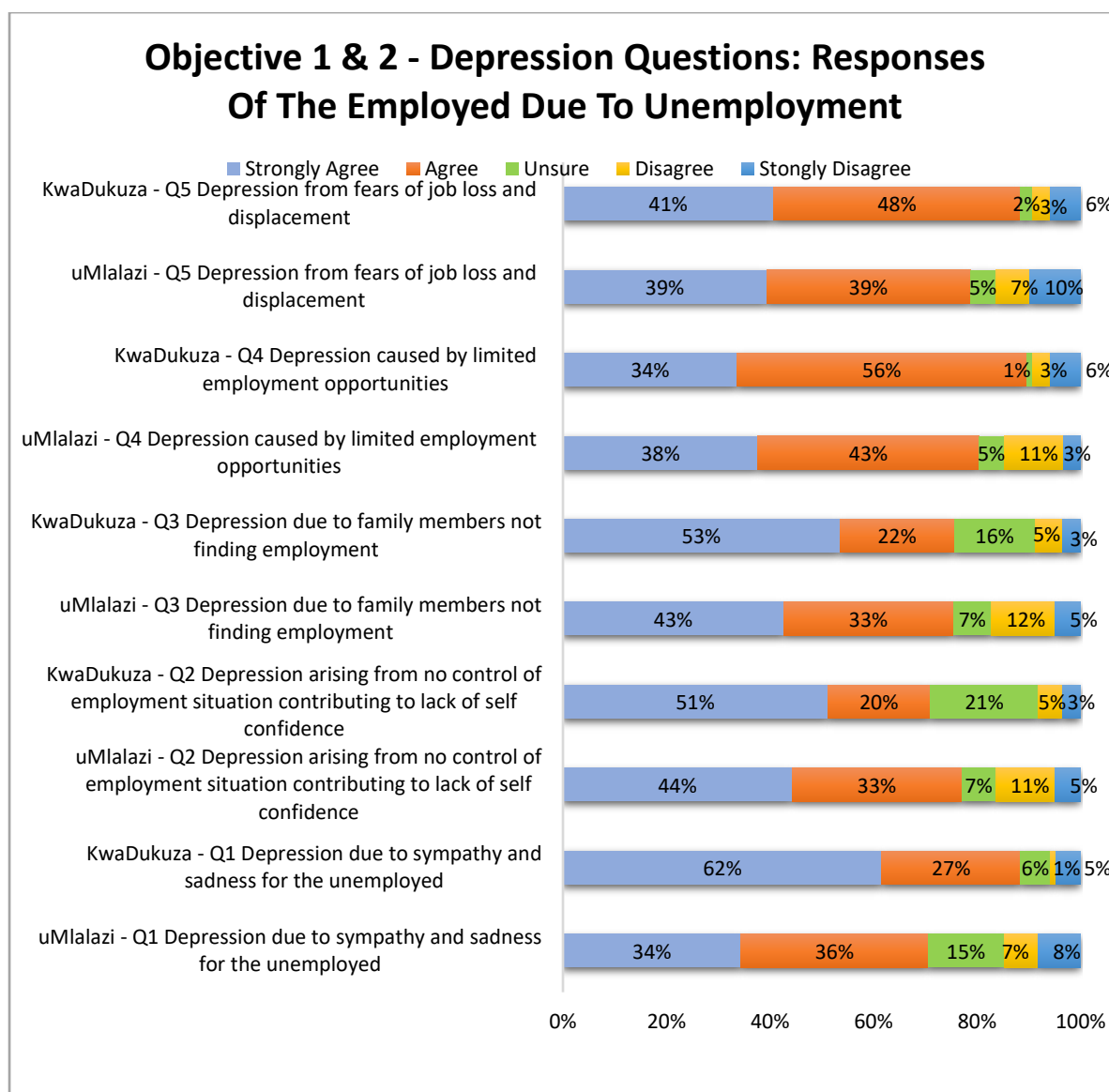


Figure 4.11: Survey questions relating to depression experienced by the employed due to unemployment

Question one focused on the effects of depression associated with sadness felt by employed individuals towards people seeking employment and not finding employment because of the current economic conditions. The KwaDukuza respondents (88.8%) demonstrated a greater tendency of empathy towards unemployed individuals seeking employment and are unsuccessful than the uMlalazi respondents, with only 70.3% showing sympathy towards unemployed individuals that cannot find employment. In the region with low unemployment, male respondents (90.9%) across all job types and aged categories showed a greater sense of compassion towards unemployed individuals than female respondents (86.8%). However, in the region with high unemployment, the

converse in terms of gender types feeling empathy for employment seeking unemployed individuals was observed i.e. 80.6% female participants in comparison to 56.0% male participants.

Question two examined the effects of depression experienced by the employed due to feeling worthlessness of not having any control of their employment situation to improve social standing. From the survey data, 71% of respondents in KwaDukuza area and 77% of respondents in uMlalazi region, of which most of them had matric as their highest education, felt that they had no control of their employment situation which contributed in them feeling insignificant. Overall, there were more female respondents (71.7% females for KwaDukuza and 80.6% females for uMlalazi) than male respondents in both geographical regions that felt irrelevant for not having any control over their employment situation to improve their social standing.

Question three investigated the effects of depression felt by the employed arising from unemployed family members actively seeking employment and remain unemployed. Both areas shown comparable results (KwaDukuza had 75% of the respondents and uMlalazi had 76% of respondents) in terms of the responses provided by the respondents that felt depressed due to their family members not being able to find employment. Further analysis of the data revealed that there was a larger composition of male respondents (92.3%) in comparison to female respondents (71.4%) in the KwaDukuza region that felt depressed due to their family members not being able to find employment. The converse was found to be the case for the uMlalazi region with 79.3% females in comparison to 72.5% male respondents.

The outcome of the survey shown for Question four, for both regions in Figure 4.11 is the average of 2 questions which examined the effects of depression on employed individuals, triggered by limited employment opportunities in the country. On average, there was a significant percentage of participants in both regions (89.9% respondents for KwaDukuza and 80.7% respondents for uMlalazi) that indicated they felt depressed given the limited employment outlook in the country. In the region with high unemployment levels, administrators (83.3%) and toll collects (78.6%) showed a greater tendency of feeling depressed due to limited employment opportunities when compared to managers (50.0%) and supervisors (71.4%). In terms of gender, on average there was a higher percentage of male participants (82.6%) in comparison to females (76.4%) that

experienced depression due to the limited employment outlook in the country for the uMlalazi region. The survey data for KwaDukuza on the other hand revealed a larger percentage of male respondents (86.9%) from all job positions in the toll plaza, when compared to their female counterparts (76.7%).

Question five investigated the effects of depression experienced by the employed caused by fear of being unable to work and ensuing displacement because of poor economic conditions. Many employed individuals for both regions (88.6% for KwaDukuza and 78.7% for uMlalazi) have indicated that they felt depressed knowing that when they are unable to work their family will be displaced because their remaining family member are unable to find employment. Foundational level employees consisting mainly of toll collectors (83.7% of the total composition of toll collectors that participated) seemed to be the worst affected. From a gender perspective, there was a higher percentage of females (80.6%) in comparison to males (76.0%) for uMlalazi that felt depressed, realising that once they are unable to work, their family would become homeless. For KwaDukuza region, the converse was found to be the case i.e. higher percentage of males (93.9%) in comparison to females (84.9%) that were affected.

4.4.2.4 Stress experienced by the employed caused by unemployment

The effects of stress experienced by the employed emerging from unemployment associated with partner's unemployment, sole provider, and its impact on quality of life were explored through questions one to three for both regions. The mode for the three stress related questions were "Strongly Agree" (mode=1).

The actual cumulative percentages for the responses ranging from strongly agrees to strongly disagree from the survey results are illustrated in Figure 4.12.

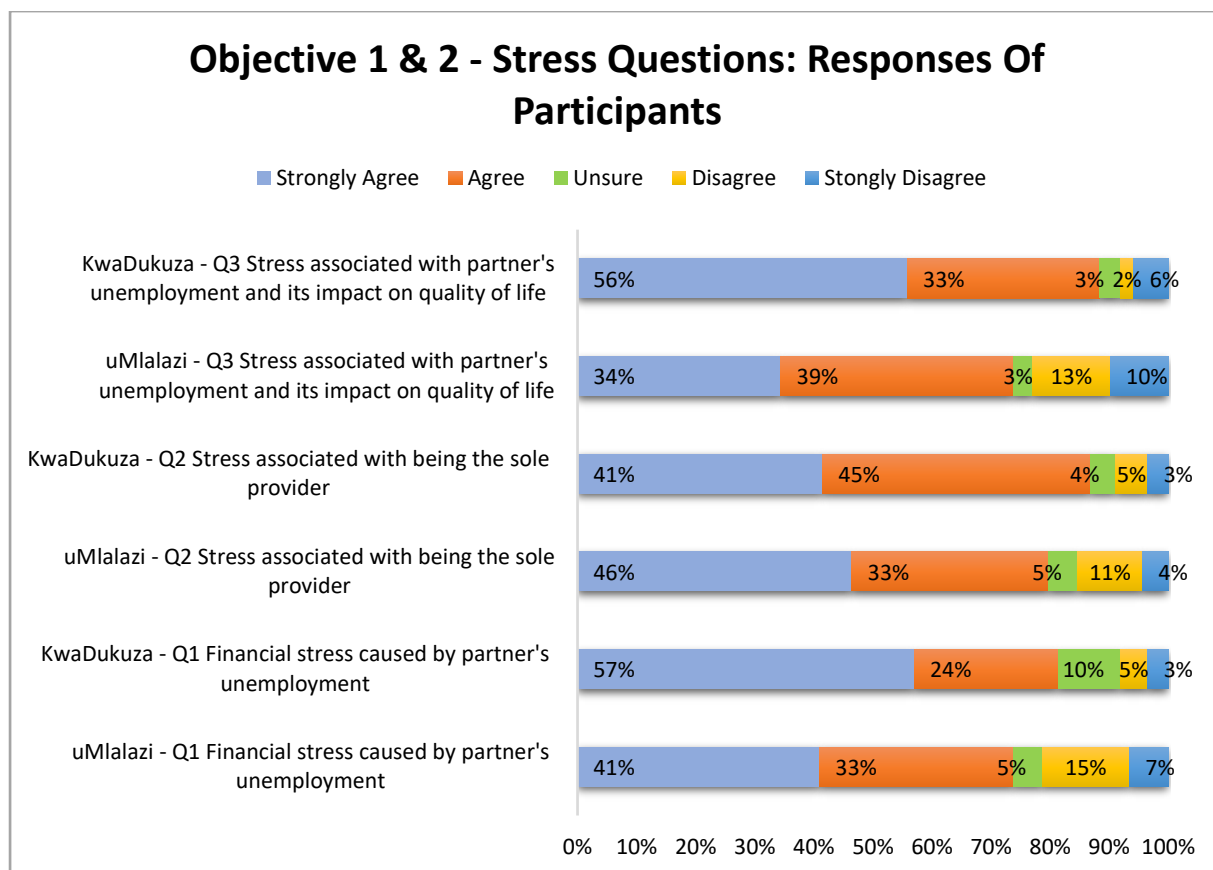


Figure 4.12: Survey questions relating to stress experienced by the employed due to unemployment

Question one investigated the effects of financial stress due to the respondent's partner becoming a victim of unemployment. The data revealed that a significant percentage of respondents for both areas (81.4% of respondents in KwaDukuza and 73.8% of respondents for uMlalazi) indicated that they felt resentment towards their partner for becoming unemployed as they had to work overtime to provide the bare essentials for their family. Male respondents (83.0% in KwaDukuza and 80.6% in uMlalazi) in both regions showed a greater tendency of resentment towards their partners for being unemployed in comparison to female respondents (78.8% in KwaDukuza and 64.0% in uMlalazi) for the respective region. In terms of job position on average for both regions, 35.7% managers, 83.2% administrators, 77.3% supervisors and 78.6% toll collectors felt anger towards their partners for becoming unemployed and leaving them with the financial burdens of the family.

Three questions were used in the questionnaire to determine the effects of stress associated with being the sole provider of the family. Question two in Figure 4.12 reflects the average of the three questions. Based on the survey results, it was observed that on

average, more respondents (86.8% for KwaDukuza) in the region with low unemployment level felt stressed out and overwhelmed given the sole financial responsibility to provide for their family needs than the region with high unemployment (79.8% respondents for uMlalazi). Further data analysis using cross tabulation techniques revealed that more male respondents (89.4%) in KwaDukuza and female respondents (81.5%) in uMlalazi felt stressed out because of sole provider responsibility than their respective gender counterparts for the corresponding regions i.e. 83% female respondents for KwaDukuza and 77.3% males for uMlalazi. From a job status perspective, employed individuals that worked either as administrators (90.6%), supervisors (81.4%) or toll collectors (84.2%) in the three toll plazas recorded the high percentage of responses in terms of feeling stressed out as being the breadwinner of the family.

Question three assessed the effects of stress associated with employed individual partner's being unemployed and the impact it has on the employed individual's quality of life. The results from the survey showed that 88.4% of respondents for KwaDukuza and 73.8% respondents for uMlalazi feared that their quality of life will not improve due to their partner becoming a victim of unemployment. In terms of gender, a larger percentage of male respondents from the total male sample population in both regions (90.9% for KwaDukuza and 80.6% for uMlalazi) in comparison to female respondents for the respective regions (86.8% for KwaDukuza and 64.0% for uMlalazi) felt their quality of life will not improve due to their partner falling prey to unemployment.

4.4.3 Morale of the employed considering the unemployment rate

This section investigates the psychological consequences unemployment has on the morale of the employed in terms of job security, spill-over effect of partners unemployment in the work environment, work efficiency and productivity by reviewing the responses provided by the participants, probing the collective response ranging from strongly agree to strongly disagree and central tendencies.

The questionnaire was crafted with seven questions dedicated to understanding the effect unemployment has on the different facets of work morale, which were administered to toll plaza employees at the KwaDukuza (low unemployment rate) and uMlalazi (high unemployment rate) regions of toll plazas. The seven questions were coded to minimise

the effects of question order bias and habituation. Hence, the question mapping is contained in section 3.7.

The data has been analysed using cross tabulations techniques across the various demographic data in order to present the reader with a holistic view as to the effects unemployment has on the morale of the employed which is conferred in the narrative. The actual cumulative percentages for the responses ranging from strongly agrees to strongly disagree is illustrated in Figure 4.13 for all seven questions.

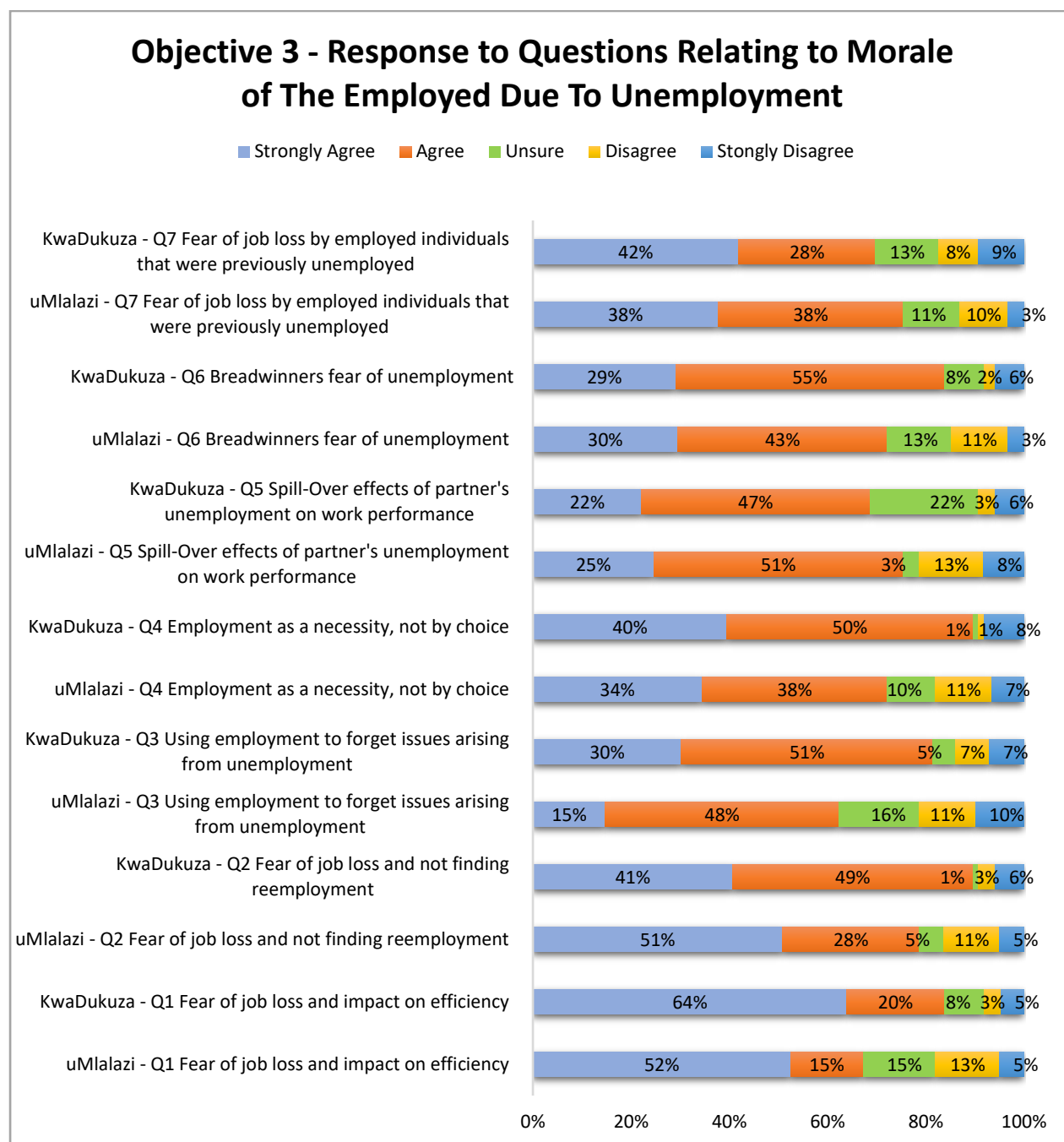


Figure 4.13: Survey questions relating to morale of the employed due to unemployment rate

Question one investigated the effects of fear of job insecurity and its impact on work efficiency. The survey results showed that 83.7% of the respondents for KwaDukuza and 67.2% of the respondents for uMlalazi indicated that they did not use methods other than the methods proposed by their superiors to perform their work function even though their approach might be more efficient and increase productivity, as they feared job loss due to the associated uncertainty with their methodology. The mode reflected a greater tendency towards strongly agree (Mode=1) for both regions across all job categories. In terms of gender, it was observed that 90.9% of the total male respondents in the region with low unemployment rate feared job loss due to uncertainty associated with their own methodology to improve work performance in comparison with 79.3% of the total female responses for the same region. For the region with a high unemployment rate, there was a higher percentage of female respondents i.e. 77.8% in contrast to 52.0% male respondents that indicated that they are not willing to take risks with a different work methodology due to associated uncertainties that can result in job loss.

Question two examined the consequences of fear of job loss and not finding subsequent work. There was a high percentage of respondents for both regions (89.5% for KwaDukuza, 78.7% for uMlalazi, and mode = 1 i.e. “Strongly Agree” for both regions) who indicated that they are in constant fear of losing their job and not being able to find work opportunities should they lose their job. With regards to job description, age, education and gender for question two, the data revealed that there was a high percentage (>80%) of foundational level employees of which majority were between the ages of 18 to 35 years and had matric as their highest level of education who feared losing their jobs and not finding work. In terms of gender, a significant percentage of male (97.0%) in comparison to females (85.0%) in KwaDukuza feared becoming unemployed and not finding work thereafter. uMlalazi was in stark contrast to KwaDukuza in terms of gender as it had a higher percentage of females (80.6%) in comparison to males (76.0%) that were afraid of becoming unemployed.

Question three explored how employed individuals used work to forget issues arising from unemployment. An overwhelming majority of the participants across all demographics (81.4%) in KwaDukuza, as opposed to 62.3% of the respondents in uMlalazi indicated that they preferred to be at work as this allows them to forget about their problem caused by the current unemployment rate. 87.9% of male respondents and

77.4 % of female respondents in KwaDukuza favoured to be at work in an attempt to forget about their problems due to unemployment. In uMlalazi more females (69.4%) than males (52.0%) used work to forget issues affecting them caused by unemployment.

Question four looked at how unemployment force individuals to take jobs that they would not ordinarily consider due to employment scarcity and financial sustainability. Out of the 89.5% of the respondents in KwaDukuza and 72.1% of the respondents in uMlalazi region that indicated their current jobs are not what they intended on doing, but because of their circumstance as the sole supporter of their family they had no alternative, only 40% and 34% of the respondents for KwaDukuza and uMlalazi respectively felt strongly about the effect employment scarcity had on their career choices. Looking at the effects on gender, age and education in the region with a low unemployment level, a sizeable percentage of respondents (93.9% of the total male responses and 86.8% of the total female responses) with majority of them between the ages of 18 to 36 who had matric as their highest level of education and occupied foundational level jobs were working in these positions out of necessity. There were more female respondents (75%) in contrast with male respondents (68.0%) in the uMlalazi district that felt trapped in an occupation due to employment scarcity.

Question five investigated the spill-over effect of partner's unemployment on the employed individual's work performance. There were more respondents (75.4%) in the region with high unemployment than the region with low unemployment (68.6%) who were of the view that their problems associated with their partner's unemployment adversely affected their work performance. Exploring the data, it was observed that female respondents (80.6% compared to 68.0% males from uMlalazi) with majority of them occupying foundational level jobs in the region with high unemployment and male respondents (69.7% compared to 67.9% females from KwaDukuza) with a significant percentage of them being in senior positions in the region with low unemployment felt that the issues associated with their partner's unemployment negatively impacted on their performance at work.

Question six examined the effects of fear of job loss between co-workers that are sole supporters. The region with a low level of unemployment had a larger percentage of respondents (83.7% of the total respondents) in comparison to the region with a high level of unemployment (62.1% of the total respondents) that indicated many of their co-

workers have expressed fear of losing their jobs as they are breadwinners. Scrutinising the data, it was observed that a sizeable percentage of male respondent in both regions i.e. 91% and 76 % as opposed to 79.3% and 69.5% female respondents for the KwaDukuza and uMlalazi regions respectively indicated their co-workers confided in them their fears of job loss.

Question seven explored fear of job loss by employed individuals due to previous unemployment experience arising from prolong periods of searching and securing employment. The region with a high unemployment rate had a greater number of respondents (75.4%) than the region with a low unemployment rate (69.8% respondents) that indicated it had taken them an extensive period to find employment and hence they fear losing their jobs. From a gender perspective, there were a greater percentage of the total male respondents in both regions (78.8% of males in KwaDukuza and 76% males in uMlalazi) that fear losing their job due to the extensive time it has taken to find re-employment when compared to the female respondents in the respective regions (64.2% of females in KwaDukuza and 75% females in uMlalazi).

4.5 Inferential statistic – Bivariate and multivariate analysis using factor analysis

This section is broken down into 2 main subsections, the first subsection uses bivariate and multivariate analysis to test hypothesis H1 and H2. The subsequent subsection utilises multivariate technique to test hypothesis H3.

4.5.1 Hypotheses [H1] and [H2] testing

The psychological consequences of unemployment on the employed cannot be measured directly as it is multi-facet. However, the effects of unemployment on the stress, anxiety and depression levels of the employed and its associated effects on mental state can be explored. This section firstly, examines the relationship between adverse social life experiences cause by unemployed friends and the wellbeing of the employed using a bivariate analysis, thereafter exploratory factor analysis is used to facilitate in determining if the facets are reflective of a single variable or the different measures are driven by the primary variable.

4.5.1.1 Hypothesis [H1] testing using bivariate analysis

A bivariate analysis was conducted to determine the relationship of the employed individual's wellbeing due to adverse effects on their social life experiences arising from

their friend's unemployment. Spearman's rank correlation was used to determine the extent to which the association was monotonic between the two ordinal type variables i.e. wellbeing and social life experience attributed to unemployment (Field, 2013).

The results as evident in Table 4.3 indicate that the Spearman's rho rank correlation coefficient for wellbeing and social life experience was 0.346, which is statistically significant ($p < .001$ for a two-tailed test) based on 147 complete observations. Hence the finding demonstrates that there is a positively correlated relationship between the employed social life experiences and wellbeing. This implies that these variables are inclined to increase together. The magnitude of the affiliation is positive ($0 < |p| < .1$).

Table 4.3: Relationship between wellbeing and social life experiences using Spearman correlation for hypothesis [H1]

Hypothesis 1-Relationship between wellbeing and social life experiences			
		1.Social life has been adversely affected due to unemployed friends	2.Current unemployment in the country has negatively impacted on wellbeing
1. Social life has been adversely affected due to unemployed friends	Spearman's rho	1.000	.346
	Sig. (2-tailed)		.000
	N	147	147
2. Current unemployment in the country has negatively impacted on wellbeing	Spearman's rho	.346	1.000
	Sig. (2-tailed)	.000	
	N	147	147
**. Correlation is significant at the 0.01 level (2-tailed)			

4.5.1.2 Hypotheses [H1] and [H2] testing using principal axis factoring

Factor analysis attempts to attain parsimony, by explicating the maximum quantity of mutual variance in a correlation matrix, by utilising the lowest number of explanatory constructs referred to as factors (latent variables). The factors represent clusters of variables that are highly correlated with one another (Gorsuch, 2014).

To assist in optimisation and equalisation of the factor structure, rotations was utilised. In terms of the conceptual framework as per section 3.14 of chapter 3 and the underlying theories presented in the theoretical review in section 2.2 of chapter 2, the latent variables used to measure the constructs were considered to be related resulting in the use of

oblique rotation i.e. direct Oblimin in SPSS, as orthogonal rotation is used for unrelated independent factors and oblique rotation is utilised for related factors (Field, 2013).

Principal axis factoring was employed to identify underlying factors which can explain the 19 variables of the questionnaire applicable to stress, anxiety and depression of the employed participants due to unemployment.

Kaiser-Meyer-Olkin (KMO) test was undertaken to determine the measure of sampling adequacy. KMO measure has a scale ranging from 0 to 1. A KMO index that is greater than 0.6 is generally considered adequate for principal axis factoring (PAF) and a KMO index closer to 0 implies that PAF is inappropriate (Field, 2013). The KMO value computed for this study as shown in Table 4.4 was 0.935 for KwaDukuza and 0.920 for uMlalazi indicating that the principal axis factoring is appropriate.

Bartlett's Test of Sphericity (BTS) was used to determine the significance of the research and thus demonstrates the appropriateness and validity of the responses gathered in understanding the problems being addressed in this research study (Field, 2013). From Table 4.4 the significance for the BTS was calculated to be less than 0.05 for both regions confirming the applicability of factor analysis.

Table 4.4: Sampling adequacy and sphericity test results for [H1] and [H2]

KMO and Bartlett's Test			
Region		KwaDukuza	uMlalazi
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.935	.920
Bartlett's Test of Sphericity	Approx. Chi-Square	1820.990	1290.725
	Df	171	171
	Sig.	.000	.000

The amount of variability was determined by the eigenvalue with component eigenvalues higher than one, signalling that the variance in the component is vital for data retention. Hence, the analysis revealed that the nineteen variables used in the survey to determine the psychological consequences of unemployment arising from SAD on the employed can be reduced to 2 underlining factors for both regions, identified using the Kaiser rule as evident in Table 4.5. The 2 underlining factors explain 71.7% of the data variance for KwaDukuza and 74.8% of the data variance for uMlalazi, hence 71.7% and 74.8% of the information for all nineteen variables can be predicted by the two factors for the respective

regions. The remaining 17 components account for 28.3% of the data variance for KwaDukuza and 25.2% of the data variance for uMlalazi.

The communalities computed were high with the average communalities equating to 71.7% ($13.629/19 = 0.717$) for KwaDukuza and 74.8% ($14.216/19 = 0.748$) for uMlalazi, indicating that the extracted components adequately represented the 19 variables for each region. The lowest communality computed for KwaDukuza was for question 14 which accounted for 55.4 % of the variance relating to depression arising from limited employment opportunities and the highest communality computed was for question 2 accounting for 82.5% of the variance relating to anxiety associated with fear of unemployed family members resorting to substance abuse brought about by unemployment.

For uMlalazi, question 17 which examined the effects of stress associated with being the sole provider had the lowest communality i.e. 65.3% of the data variance. and question 3 that investigated effects of anxiety due to fear of children future job opportunity had the highest communality equating to 84.4% of the data variance.

Table 4.5: Principal axis factoring - Total variance explained for variables for hypotheses [H1] and [H2]

Region	Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
KwaDukuza	1	12.847	67.617	67.617	12.574	66.179	66.179	11.509
	2	1.347	7.087	74.704	1.057	5.564	71.742	10.132
uMlalazi	1	13.387	70.459	70.459	13.137	69.141	69.141	12.333
	2	1.321	6.955	77.414	1.080	5.685	74.827	11.136
Extraction Method: Principal Axis Factoring.								
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.								

The rotated component matrix as illustrated in Table 4.6 facilitated in providing information relating to the affinity of variables to the two-underlining component identified in Table 4.5. The nineteen variables were central in determining the mental effects of

unemployment arising from stress, anxiety and depression on the employed. The outcome of the factor analysis further revealed the following:

- (a) First component for KwaDukuza had moderate to strong correlation as shown in Table 4.6 with variables relating to anxiety arising from fear of unemployed family members becoming substance abusers, anxiety from fear of poverty and future employment opportunities, anxiety due to fear of children future job opportunity, anxiety from family's future employment sustainability, depression from fears of displacement, depression caused by limited employment opportunities, depression due to family members not finding employment, depression arising from no control of employment situation contributing to lack of self-confidence and stress associated with being the sole provider.
- (b) Second component for KwaDukuza had moderate to strong correlation as shown in Table 4.6 with variables relating to anxiety stemming from fear of unemployed family/ friends LOS, anxiety from family's future employment sustainability, depression due to sympathy and sadness for the unemployed, financial stress caused by partner's unemployment, stress associated with being the sole provider and stress associated with unemployed partner which impacts quality of life.
- (c) First component for uMlalazi had moderate to strong correlation as shown in Table 4.6 with variables relating to anxiety arising from fear of unemployed family members becoming substance abusers, anxiety from fear of poverty and future employment opportunities, anxiety due to fear of children future job opportunity, anxiety of breadwinner to provide tertiary education, anxiety stemming from fear of unemployed family/ friends, anxiety from family's future employment sustainability, depression from fears of displacement, depression caused by limited employment opportunities, depression due to sympathy and sadness for the unemployed and stress associated with being the sole provider.
- (d) Second component for uMlalazi had moderate to strong correlation as shown in Table 4.6 with variables pertaining to anxiety caused by family's future employment sustainability, depression due to family members not finding

employment, depression arising from no control of employment situation contributing to lack of self-confidence, financial stress caused by partners unemployment and stress associated with unemployed partner that has an impact to quality of life.

Table 4.6: Principal Axis Factoring - Rotated component matrix used to investigate the effects of SAD on the employed due to unemployment

Pattern Matrix Component	KwaDukuza		uMlalazi	
	Components ^a		Components ^b	
	1	2	1	2
1. I am afraid that if my family members/friends that are unemployed, do not find jobs they will lose their self-confidence.	.145	.699	.866	-.001
2. Many of the people that are of working age in my neighbourhood and where actively seeking employment are still unemployed and are now resorting to alcohol or other types of substance abuse, hence I fear the same thing will happen to my family member	.901	.010	.814	.068
3. I fear my kids will have to take the first work opportunity that presents itself to avoid unemployment.	.826	-.008	.928	-.012
4. I fear that I won't be able to send my children to a tertiary institution as I barely make ends meet as the sole supporter.	.750	.165	.823	.033
5. I fear that my love ones will end up in poverty as they won't be able to find work.	.991	-.250	.633	.279
6. I have anxiety thinking about the future of my family members ability to earn a living given the unemployment rate.	.337	.592	.674	.215
7. I constantly worry that my family/ friends will not find work and hence their living standards will not improve.	.347	.467	.057	.841
8. I do not get much sleep worrying about the future of my family given the current levels of unemployment.	.688	.226	.110	.769
9. I feel sad when I see people that are looking for jobs and cannot find any employment opportunities.	.276	.586	.892	-.077
10. I feel a sense of worthlessness as I do not have any control of my employment situation to improve my social standing.	-.155	.932	.342	.568
11. I am depressed as all of my family members that were seeking work could not find work in the past six months.	.723	.237	.175	.750
12. I feel depressed thinking of the employment outlook in the country	.798	.134	.975	-.161
13. I feel depressed thinking that once I am unable to work my family will not have any shelter as none of them are able to find work.	.761	.160	.829	.075
14. I feel depressed knowing there are limited employment opportunities.	.377	.429	-.041	.886

15. I try to work overtime as much as possible in order to provide the bare essentials for my family given that my partner is unemployed, and this makes me feel anger towards my partner.	.013	.814	.452	.446
16. I am the breadwinner /major supporter of my family's needs and hence feel overwhelmed as none of the other members in my family could find work in the past six months.	.496	.385	.272	.637
17. I constantly feel stressed out given the sole responsibility to provide for my household.	.491	.439	.705	.128
18. I cannot focus on my work worrying how I will be able to cover all our bills (electricity, water etc).	.831	.103	.763	.126
19. I fear my quality of life will not improve as my partner is a victim of unemployment.	.205	.721	-.129	.992
Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Questions 1 to 8 are anxiety related, 9 to 14 are depression related and 15 to 19 are stress related a Rotation converged in 15 iterations. b Rotation converged in 7 iterations				

Overall the two components for the respective regions attracted the variables associated with stress, anxiety and depression confirming that the constructs are interrelated. All variables with correlations less than absolute 0.4 in Table 4.6 were considered to be either trivial or loadings and have been omitted in terms of grouping the latent variables to the underlying components.

4.5.2 Hypothesis [H3] testing using principal axis factoring

Principal axis factoring with Oblimin rotation was used to identify underlying factors applicable to the 7 questions which investigated the effect unemployment had on the morale of the employed in terms of job security, spill-over effect of partner's unemployment in the work environment, work efficiency and productivity.

Kaiser-Meyer-Olkin (KMO) test was undertaken to determine the degree of sampling relevance. The KMO computed for KwaDukuza and uMlalazi as shown in Table 4.7 were greater than 0.6 implying that principal axis factoring (PAF) is appropriate (Field, 2013).

Bartlett's Test of Sphericity (BTS) was used to demonstrate the suitability and validity of the responses gathered in understanding the problems being addressed in this research study and was computed to be less than 0.05 as shown in Table 4.7, confirming the applicability of factor analysis (Field, 2013).

Table 4.7: Sampling adequacy and sphericity test results for [H3]

KMO and Bartlett's Test			
Region		KwaDukuza	uMlalazi
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.893	.912
Bartlett's Test of Sphericity	Approx. Chi-Square	473.900	272.572
	Df	21	21
	Sig.	.000	.000

The amount of variability was determined by the eigenvalue with component eigenvalues higher than one, signalling that the variance in the component is vital for data retention. Hence, the analysis revealed that the seven variables used in the survey to determine the impact unemployment has on the employed morale can be reduced to a single factor as shown in Table 4.7 for each region. The underlining factor for KwaDukuza explained 66.65% of the cumulative data variance and the factor for uMlalazi explained 63.31% of the cumulative data variance after extraction. The remaining 6 components explained the balance of the data variance for the respective regions.

The communalities computed were high with the average communality equating to 66.65% ($4.666/7 = 0.6665$) for KwaDukuza and 63.31% ($4.432/7$) for uMlalazi, indicating that the extracted components adequately represented the seven variables.

Table 4.8: Principal Axis Factoring - Total variance explained for hypothesis [H3]

	Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
KwaDukuza	1	4.973	71.049	71.049	4.666	66.655	66.655
uMlalazi	1	4.789	68.409	68.409	4.432	63.317	63.317

Extraction Method: Principal Axis Factoring.

The component matrix as shown in Table 4.9 facilitated in providing information relating to the affinity of variables to the factor identified in Table 4.8. The seven variables are central in determining the impact unemployment has on the morale of the employed.

A single factor was extracted for KwaDukuza and uMlalazi regions respectively which had moderate to strong correlation with the variables associated to fear of job insecurity that impacts on work efficiency, fear of job loss, work used to forget issues arising from unemployment, employment as a necessity, not by choice, spill-over effects of partner's unemployment on work performance, breadwinners fear of unemployment and fear of job

loss by employed individuals that previously experienced unemployment as shown in Table 4.9.

Table 4.9: Principal Axis Factoring - Factor Matrix for understanding the effects unemployment has on the morale of the employed

Factor Matrix ^a	KwaDukuza	uMlalazi
	Factor	Factor
	1	1
1. I do not use methods other than the methods proposed by my superior to perform my work function even though my methods might be more efficient and increase productivity, as I am scared that I might lose my job given the uncertainty associated with the new methodology.	.808	.787
2. I am in constant fear of losing my job and not being able to find work opportunities should I lose my job.	.868	.786
3. I prefer to be at work as this allows me to forget about my problems.	.731	.662
4. My current job is not what I intended to do but because of my circumstance as the sole supporter of my family, I have no alternative but to do this job.	.925	.825
5. I find that my problems associated with my partners unemployment adversely affects my performance at work.	.808	.833
6. Many of my co-workers have expressed their fear of losing their jobs as they are breadwinners.	.892	.849
7. It took me a long time to find work and as a result I fear losing my job.	.648	.813
Extraction Method: Principal Axis Factoring.		
a. 1 factors extracted.		

The results revealed that all the variables associated with morale of the employed due to unemployment are interconnected and hence unemployment has an adverse effect on the morale of the employed arising from direct and indirect effects of unemployment.

4.6 Summary of data analysis

Chapter four presented the participation statistics of the survey undertaken together with the reliability analysis of the data for the KwaDukuza and uMlalazi regions. All data was analysed at a 99% confidence interval and the Cronbach alphas were computed to be approximately 98% for both regions signifying a high degree of data reliability.

Descriptive statistical analysis was conducted for the demographics, the responses to the 21 questions associated with the psychological consequences of unemployment on the employed and its impact on the stress, anxiety, and depression levels of the employed,

the responses to the 7 questions pertaining to the morale of the employed due to unemployment were discussed, presented and summarised using tables, figures, and graphs.

The inferential statistical analysis was performed using bivariate analysis to determine the statistical significance between the employed wellbeing and social life experiences due to unemployment. Factor reduction analysis with oblique rotation was then performed for the 19 questions relating to stress, anxiety and depression to determine the overall effect SAD has on the mental state of the employed. Factor reduction analysis was then conducted on the 7 questions relating to unemployment effects on work morale of the employed, to determine its impact on overall work productivity.

The Kaiser-Meyer-Olkin (KMO) index for the factor reduction analyses that were undertaken were all greater than 0.9, demonstrating the appropriateness of factor analysis for the hypothesis H1, H2 and H3 testing. Furthermore, Bartlett's Test of Sphericity (BTS) were computed to be less than 0.05 confirming the applicability of factor reduction analysis.

The factor reduction analysis resulted in two-underlining factors being extracted for the respective regions and accounting for a significant percentage of the total variance for hypotheses H1 and H2 testing. A single factor was extracted for hypothesis H3 testing accounting for a substantial portion of the total data variance for each of the specified regions.

The discussions pertaining to the linkage between the literature, data analysis and the three main objectives of this research study together with the conclusions are presented in chapter five.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 Introduction

The objective of this study was to investigate the psychological consequences of unemployment on the employed by determining firstly, what impact unemployment has on the employed mental wellbeing. Secondly, whether unemployment increases the stress, anxiety, and depression level of the employed. And finally, how work morale of the employed is affected due to unemployment. The research objectives were transformed into 3 hypotheses and their corresponding null.

The data analysis and presentation in chapter four have established certain noteworthy relationships amongst the dependent latent variables tested and the independent variable. This chapter pursues to formulate rational deductions from the analysed data presented in the previous chapter with the literature review undertaken in chapter two for the 3 hypotheses of the study presented in chapter one, in determining if the hypotheses are valid or not.

5.2 Hypothesis One [H1]: Psychological consequences of unemployment on the employed

The objective of this hypothesis was to determine if unemployment has psychological consequences on employed individuals in the toll industry. The term psychological consequences used in this study was defined in section 1.7.2 under operational definitions.

To determine the existence of the psychological consequences of unemployment, this study identified several sub-themes in the literature review i.e. wellbeing, quality of life, employability and employment situation, unemployment effects on self-confidence, unemployment effects on social life experiences and unemployment effects on relationships. The literature reviewed facilitated in designing the research instrument to determine if there existed any psychological consequences arising from unemployment on the employed. The methodology employed to obtain the data was described in chapter 3 and the data analyses was provided in chapter 4. This section discusses the outcome of the data analysis guided by the literature review in chapter 2 to establish if the first hypothesis is true or its null holds true.

5.2.1 Discussion of hypothesis one

The Spearman's rho rank correlation coefficient was 0.346 for the employed wellbeing and social life experience due to unemployment, which is statistically significant ($p < .001$ for a two-tailed test) based on 147 complete observations. Thus, the finding confirms that there is a positive correlated relationship between the employed social life experiences and wellbeing as a result of unemployment which is statistically significant. This infers that the employed individual's wellbeing is directly related to their social life experiences shaped by their unemployed friends.

Factor reduction analysis was utilised to accomplish parsimony, by explaining the maximum amount of common variance in a correlation matrix via utilising the lowest number of explanatory constructs called factors. Kaiser-Meyer-Olkin which is used to determine the measure of sampling adequacy was 0.935 for KwaDukuza and 0.920 for uMlalazi indicating that the principal axis factoring was appropriate. Bartlett's Test of Sphericity which is used to determine the significance of the research in terms of appropriateness and validity of the responses gathered was found to be less than 0.05 for both regions confirming the applicability of exploratory factor analysis (Field, 2013).

Principal axis factoring revealed that there is a strong affinity between the latent variables used for investigating the psychological consequences of unemployment on the employed towards 2 common central factors. On average, the latent variables used to determine and understand the psychological consequence of unemployment on the employed for both regions had communalities greater than 70%, demonstrating that the extracted components adequately represented the latent variables. The result revealed that there are strong correlations between the variables and the 2 underlying factors identified in both regions of contrasting unemployment rates. The factor analysis confirmed that the constructs are inter-reliant with the changes in the environment and that the unemployment latent variables had an impact on the mental state of the employed due to experiencing unemployment first hand or through their psychological connection with unemployed people.

The next part of the discussion will focus on the pertinent information uncovered from the descriptive statistics on the impact unemployment has on the employed wellbeing, quality of life, employability and employment situation, self-confidence, social life experiences and effects on relationships.

The data revealed that employed individual's wellbeing and quality of life (QOL) are adversely impacted by the associated effects of unemployment. Employed individuals living in areas where there is a high unemployment level (uMlalazi) were less prone to the effects of unemployment, as observed in Figure 4.9, when compared to employed individuals living in an area with a low unemployment level (KwaDukuza). This finding concurs with Gathergood's (2013) evidence that suggest that the psychological effects of unemployment are less pronounced in areas where there is a high unemployment rate and more devastating in areas where there is a low unemployment rate.

Employed men were susceptible to effects of unemployment in the region with low unemployment as opposed to women, this could be attributed to social pressure together with their paternal instinct to financially provide for their families and hence a high unemployment rate inhibits their abilities to financially sustain their family's needs.

Employed women in the region with high unemployment seem to be more vulnerable to the effects unemployment has on their mental wellbeing and quality of life than their male counter parts. A plausible reason for this outcome is that many of the female respondents in the region with high unemployment are breadwinners and hence the financial stress associated with sole provider responsibility adversely affects mental wellbeing.

From an employment position, the data revealed that there were more employed individuals in foundational level positions in both regions that indicated their wellbeing and quality of life was negatively affected due to the psychological effects unemployment had on their daily lives, with there being a greater number of respondents in the region with a lower rate of unemployment as opposed to the region with high unemployment levels. This observed outcome could be due to the stigmatisation placed on being unemployed by society in the region with low unemployment level together with the additional pressure on individuals trying to increase their overall social standing to fit within the community as opposed to the region with a high unemployment rate where there is not much societal pressure regarding employment status.

Employed participants in the region with low unemployment rate demonstrated a higher tendency of anxiety brought about by their unemployed families/ friends not finding employment and subsequent loss of self-confidence than employed individuals in the region with an elevated level of unemployment. The margins between the regions were 14.9% and hence overall all participants irrespective of the region rate of unemployment

were concern for their families and friend's ability to find employment. This concern for their family and friend's ability to find employment had an adverse effect on the employed individual's mental state due to guilt of having employment and their family members and/or friend were unemployed. This finding concurs with Geishecker's (2012) finding that employed people experience guilt of having work when considering their family members and friend who have lost their job.

Male respondents (90.8%) in the region with low unemployment were more susceptible to the effects of fear caused by their unemployed family members not finding employment in comparison to their female (79.3%) counterparts. The worries exhibited by the male respondents in the region with low unemployment could stem from their own fears of job loss compounded by the fact that unemployed people in the level of low unemployment are frowned upon by society within the region. The converse was found to be the case in the region with high unemployment whereby, there were 77.8% female respondents as opposed to 68.0% male respondents that suffered from worrying about their unemployed family /friends finding employment. This contrasting effect observed between men and women for the different regions of unemployment could be due to the high percentage of employed female respondents in the region with high unemployment that understand the plight of unemployment and the effect it has on a person's ability to sustain themselves and their families.

The current unemployment level in South Africa had a profound effect on employed participant's self-confidence, as a significant percentage (>75%) of employed individuals felt a sense of worthlessness as they had no control of their employment situation due to limited employment opportunities. The data has shown that the participants in the region with a low unemployment level were more susceptible to the effects of unemployment on self-confidence when compared to their counterparts in the region with a high unemployment level. This is contrary to Dahling et al. (2013) findings that individuals who are in financial distress and have unfavourable experiences obtaining employment in regions with high unemployment have a low level of self-confidence.

Furthermore, the data has shown that women were more susceptible to the effects of unemployment on their self-confidence when compared to men. This concurs with Choi and Lee's (2013) study that investigated the link amongst youth unemployment anxiety, strain and other attributes such as mental health and self-confidence which found female

youth were more susceptible to stress arising from unemployment leading to a lack of self-confidence in preparation for employment when compared to their male counterparts who appeared to experience a lower level of unemployment stress, self-confidence and satisfaction in preparation for employment.

The effects of depression associated with sadness experienced by employed individuals towards people seeking employment and not finding employment because of the current economic conditions for both regions was investigated, and the data analysis revealed that majority of employed individuals (>70%) regardless of the level of unemployment felt sympathy towards the unemployed. This finding concurs with Quintel's (2017) suggestion that individuals feel empathy towards another person's emotional state and feel what they are experiencing due to mirror neuron. Hence, the emotional stress arising from unemployment of others could indirectly affect the mental state of employed individuals through the mirror neuron effect.

Additionally, it was observed that employed individuals living in region with high unemployment experienced a lesser degree of empathy towards unemployed people than employed individuals living in a region with low unemployment. This suggest that individuals living in a region with a high level of unemployment have become desensitised to the effects unemployment has on their community, as the effects of unemployment are considered as normal.

Men felt more sadness resulting in depression for unemployed individuals in the region with low unemployment in comparison to women. This could be due to the social pressures faced by men to provide for their families and the stigmatisation for not fulfilling this societal expectation together with the stigmatisation attached for being unemployed in areas with low unemployment which resonates empathy by the male respondents.

Employed females in regions with high unemployment levels showed more empathy towards unemployed people than employed men. A possible reason that employed men felt less empathy towards unemployed people in region with high unemployment could be due to less societal pressure associated with being unemployed, as unemployment is the norm. This desensitises men to feeling empathy. It could also be that male participants did not want to be perceived as being emotional, as this is not considered manly. Female respondents displaying more empathy than male respondents towards unemployed individuals maybe due to the pressures experienced by employed women

in the region with high unemployment to provide for their family needs, and hence the fear of being unemployed creates a more empathic feeling towards unemployed people. More research needs to be conducted to ascertain the exact cause as to why employed women felt more empathy towards unemployed people in the region with high unemployment levels and less empathy in the region with low unemployment.

The effects of stress associated with the employed individual's partner becoming unemployed were explored and the outcome from the data analysis highlighted that many (>73%) of the respondents were pessimistic regarding their quality of life improving due to their partner being unemployed and felt resentment towards their unemployed partner in both regions. However, an overwhelming majority of male respondents (>80%) were despondent regarding their quality of life and were annoyed with their unemployed partner in comparison to female respondents. One plausible reason could stem from not being able to improve their societal status on a single income stream resulting in blame and anger towards their unemployed partner who is perceived to be the cause of the financial problem. Additionally, being the breadwinner may incite anxiety amongst men who seek equitable financial arrangements with their partner. However, further research needs to be undertaken to fully understand the reasons and implications to families. Hence, the finding somewhat concurs with Geishecker's (2012) study which found that employed females felt less depressed when their male partner lost his job in contrast to employed males when their female partner experienced job loss.

Majority (>78%) of respondents felt stressed out and overwhelmed given the sole monetary responsibility to sustain their family. Further examination of the data showed that the region with low unemployment rate had more male respondents than female respondents (approximately 7.9% more male respondents) that felt stressed out because of sole provider responsibility. This could be due to societal pressure on the traditional role of men. Whereas, in the region with high level of unemployment, the converse was found to be true (approximately 5.7% more females than males). This may be attributed to more females being breadwinners based on the demographic data in areas with high unemployment and hence were forced, due to circumstances, to take on a more paternal role to ensure that their family financial obligations are fulfilled.

5.2.2 Key findings to hypothesis one

Overall, the findings show that unemployment negatively impacts the mental state, wellbeing, and life satisfaction of toll employed individuals. Men seem to be severely affected by unemployment in the region with low unemployment arising from societal pressures in terms of traditional roles of men and women, whereby men are expected to be the family financial providers and women the family nurturer. However, there appears to be a change in terms of the traditional roles of men and women when unemployment level is high, as more women are taking on the financial burden to provide for their families, making these women susceptible to the psychological costs of unemployment.

Furthermore, the data revealed that toll employed individuals have a sense of guilt for having employment when their family member/ friends are unemployed, increasing the mental stress and strain experienced through the crossover effect, compounded by societal pressures on the roles or duties of individuals depending on the socio-economic landscape within the area they reside.

Unemployment was found to have an impact on the mental state of the employed which can be explained in terms of the social norm theory, crossover and spill-over effects of the various facets of the dependent variables as set out in the conceptual framework, this emphatically validates the first hypothesis **H_{1.0}** i.e. ***there are psychological consequences resulting from unemployment (dependent variable) on the employed class (independent variable) in the Toll Industry***. Therefore, the null must be rejected.

5.3 Hypothesis Two [H2]: Unemployment impact on the stress, anxiety, and depression levels of the employed

The objective of this hypothesis was to determine what impact unemployment had on the stress, anxiety, and depression (SAD) levels of the employed.

To understand whether the level of stress, anxiety and depression increases on the employed due to the high unemployment rate, this study identified several sub-themes in the literature review i.e. breadwinners stress, anxiety, and depression (SAD) levels, poor economic outlook and its impact on the employed SAD and dependent's tertiary education and financial stress. The literature reviewed assisted with the questionnaire design used to determine the status of objective 2. The methodology employed to obtain

the data was described in chapter 3 and the survey data analysed provided in chapter 4. This section discusses the result of the data analysis according to the themes identified in chapter 2 to determine if the second hypothesis is true or its null holds true.

5.3.1 Discussion of hypothesis two

The oblique rotated 2-factor model fitted the dataset comprising of 19 variables relating to SAD experienced by the employed due to unemployment, optimally accounting for 71.7% of the data variance for KwaDukuza and 74.8% for uMlalazi. Good internal consistency was established for the scale with Cronbach alphas of 0.981 for KwaDukuza and 0.982 for uMlalazi. The KMO and BTS tests demonstrated appropriate reliability and validity as shown in Table 4.4. Intercorrelations between the factors established high positive values, signifying a strong connection between the latent variables associated with SAD which is evident in Table 4.6 for both regions.

Stress levels of the employed sole provider were found to be elevated in the region with low level of unemployment than the region with high level of unemployment based on the respondents' responses pertaining to the questions relating to stress associated with being the sole provider. Male respondents showed a greater tendency (>80%) towards experiencing stress, anxiety and depression as the sole provider in the region with low level of unemployment in comparison to the female participants (>75%). Perhaps, this is due to the societal pressures imposed on men to provide for their families from a financial standpoint. The finding concurs with Meuleman et al. (2017) that traditionally, the man of the house was required to provide for the family's financial needs through some form of employment and the wife, traditionally, if employed should earn a substantially smaller supplementary income, her primary function was to be maternal by caring for the children and managing the household.

A contrasting effect was observed from male responses in the region with high unemployment level to feeling less stress associated as the breadwinner in this region. Which could arise from the fact that the high level of unemployment in the region has placed less societal pressure for men to financially provide for their families, as many men are unemployed.

The inverse was found to be the case for women in both regions respectively i.e. showing a low response in comparison to men for the region of low unemployment and indicating

a greater tendency of feeling stress in the region of high unemployment. The cause of this could be that traditionally women were not expected to cater for their family's financial needs and hence this view is still applicable in the region where unemployment is low. However, when the unemployment rate increases, women feel the stresses associated in ensuring that their family financial needs are taken care off. This discovery coincides with Dotti Sani (2017) that during tough economic conditions, unemployed men become dependent on their female partners for financial sustainability and is in agreement with Parry and Segalo (2017) that females take on the breadwinner roles out of necessity. This in turn forces a greater burden of responsibility on the female partner causing mental strain, anxiety, depression, etc.

A vast percentage of respondents (>70%) for both regions have indicated that they felt financial stress arising from their partner becoming a victim of unemployment. Many of them were between the ages of 18 to 45 years. The actual cumulative responses are reflected in Figure 4.12 for both region of unemployment. This supports Debus and Unger's (2017) finding that high unemployment rate negatively affected the employed in households that initially had two streams of income arising from two individuals working and now has one stream of income due to one of the employed family members losing their jobs. This places a severe burden, both mentally and physically, on the sole supporter in the household to ensure family financial sustainability.

From a gender perspective, there was a higher percentage of male (>80% of the total male responses) in comparison to females (>64% of the total female responses) that felt anger towards their partners for losing their jobs in both regions. The reason for this outcome could possibly arise from the fact that these men had to work overtime in order to provide the bare essentials for their family, as their salary without the overtime was insufficient due to the current economic condition caused by inflation brought about by drought and political uncertainty that the country is currently experiencing. These findings do not support Chesley (2016) that women who become sole providers in relationships tend to show a greater sense of resentment to their unemployed partners as they have to pay more attention to their husband's sense of insecurities, lack of financial support, guilt of not having ample time to spend with their children.

Overall, the results indicate that couples become unsatisfied with their partners when their partner becomes unemployed. Partners share a common psychological link when it

comes to unemployment. Daily stresses coupled with the effects of unemployment in partnerships was found to have heightened the overall stress levels of both spouses. Furthermore, spousal behavioural dynamics relating to every day minor problems may also have an impact on elevating the overall crossover effects pertaining to stress, anxiety, and depression in both partners lives. Additionally, the parental financial distress experienced during high unemployment levels is detrimental to the emotional wellbeing of their children as this impacts on relationships via the crossover effect from parent to child and vice versa.

Survey questions relating unemployment outlook, employment opportunities and current economic condition that impacts on the employed class's concerns, worries and fears have revealed that an overwhelming majority of employed respondent (>70%) felt stressed, anxious, depressed due to fear of poverty and future employment opportunities, depression from family members not finding employment, depression caused by limited employment opportunities, fears of displacement, anxiety from family future employment sustainability, depression arising from no control of employment situation contributing to lack of self-confidence, anxiety arising from fear of poverty and future employment opportunities, depression caused by limited employment opportunities, fear of unemployment and effects on work efficiency, depression due to empathy for the unemployed, depression arising from no control of employment situation. This results concurs with current stress theories indicated by Giorgi et al. (2015) that suggest external environmental condition are determining factors of mental stress and employment dissatisfaction.

The outcome of the data analysis has shown that unemployment has an adverse effect on the employed mental state irrespective of the level of unemployment within a specific region in the country, if the country's overall unemployment level is high. Moreover, the stress, anxiety, and depression due to unemployment either directly or indirectly is felt by all employed individuals and is independent of job position and gender. This finding support the notion by Sumner and Gallagher (2017) that unemployment is directly related to an increase in cortisol levels also known as a stress hormone in an individual.

Many respondents (>75%) for both regions that are breadwinners for their family units feared that they would not be able to send their children to tertiary institutions as they do not earn enough to meet the day to day financial obligations. Male respondent

breadwinners (>80%) seemed to be more affected in both regions when compared to their female counterparts. From an employment position, all level of toll employee respondents indicated that they fear they would not be able to provide tertiary education for their children as they barely make enough to meet the day to day expenses as the sole provider of the family. This high percentage of male respondents could be due to societal pressures imprinted in men as part of their paternal duties to cater for their family's financial needs and hence educating one's child can be considered a fundamental requirement to ensure financial sustainability of their child's future. This could probably cause the male breadwinner to feel a heightened sense of stress, anxiety and depression as a result of feeling inadequate stemming from not been able to provide for his child's education.

The outcome concurs with James (2014) that the ability of not being able to provide for a child's tertiary education needs place immense financial stress on the employed parents in these households. Hence, the overall stress, anxiety, and depression levels of these sole providers could be compounded due to the crossover effect from children that have become deprived of their tertiary education. Further research needs to be undertaken to fully comprehend the long-term effect of stress, anxiety and depression experienced by breadwinners that are unable to educate their children at a tertiary level.

5.3.2 Key findings to hypothesis two

The levels of stress, anxiety, and depression (SAD) was observed to be elevated in general based on the participants responses, leaning towards *agreeing to strongly agreeing* to questions pertaining to breadwinner's SAD levels, poor economic outlook and its impact on the employed SAD, financial stress associated with dependent's tertiary education due to the unemployment.

Men presented a greater tendency based on their response to feeling stress as the sole provider in the region with low unemployment in comparison to women for the region. Women on the other hand showed a greater tendency to feeling stress associated with being the breadwinner in the region with high unemployment in comparison to men.

Unemployment was found to negatively impact the mental state of the employed individual due to crossover effects of SAD stemming from their unemployed partner and families thereby increasing the overall SAD of the employed individual.

The findings categorically confirm that the second hypothesis **H_{2.0}** holds true i.e. ***the employed (independent variable) suffer from increased levels of stress, anxiety, and depression due to the unemployment rate (dependent variables)***. Therefore, the null must be rejected.

5.4 Hypothesis Three [H3]: Morale of the employed considering the unemployment rate.

The objective of this hypothesis was to determine the impact unemployment has on the morale of the employed. The term “morale of the employed” used in this study was defined in section 1.7.2 under operational definitions.

To evaluate the impact the psychological consequences of unemployment has on the morale of the employed in the toll industry, this study identified 4 sub-themes in the literature review i.e. unemployment rate and morale, work performance and productivity, unemployed partner’s impact on morale, and job insecurity. The literature reviewed aided in designing the research instrument to evaluate objective 3. The methodology employed to obtain the data was detailed in chapter 3. The data from the survey conducted was analysed in chapter 4. This section of the chapter discusses the outcome of the data analysis according to the themes identified in chapter 2 to establish if the third hypothesis is true or its null holds true.

5.4.1 Discussion of hypothesis three

The KMO and BTS confirmed the adequacy of the sampling, reliability and appropriateness of the data set for factor analysis as evident in Table 4.7. The Factor model highlighted the interrelationship amongst the 7 latent variables associated to morale, by the strong affinity of the latent variables pinning themselves to a single factor for each of the respective regions, accounting for 66.65% of the data variance in the region with low unemployment and 63.32% of the data variance for the region with high unemployment.

The next part of the discussion will focus on the pertinent information uncovered from the descriptive statistics on the impact unemployment has on the morale of the employed considering circumstance, work performance, productivity, unemployed spouse, and job insecurity.

The survey question that was used to investigate how unemployment forces individuals to take jobs that they would not ordinarily consider due to employment scarcity and financial sustainability has revealed that majority of employed individuals (>72%), independent of the regions level of unemployment, are working in jobs for mere survival and not by choice. This has an impact on the morale of these individuals as they are forced to take up jobs given the current country's level of unemployment to pay for their basic survival needs such as shelter, food, clothing, etc. Interestingly, there was an increase of 17.4 % in the number of respondents that felt financial survival pressure in the region with low level of unemployment to take up a job that they did not intend on doing in comparison to the region with high level of unemployment. This could be due to societal pressure on individuals in the region of low unemployment level to be employed due to the stigmatisation attached to be unemployed. In the region with low unemployment, there was a high percentage of the total male respondents (93.9%) in comparison to their female counterparts (86.8%) that were working in jobs which was not by choice but out of necessity as the breadwinners of their family.

This outcome could be credited to societal expectation of men in terms of their traditional roles as sole providers which forces men to take up jobs to fulfil the expectation imposed on them by society. The converse was found to be the case for the region with high level of unemployment having more female respondents (75.0%) than male respondents (68.0%) that took up work not by choice but out of necessity. The outcome may be due to men not feeling pressurised by their communities to get a job, since there is less stigmatisation associated with not having employment in the region with high unemployment. This forces women to take up employment that they would not necessarily have opted to do, in order to sustain their family. However, further research needs to be done to fully understand the reason as to why more women in areas with high unemployment level are taking jobs that they would not have ordinarily be doing arising from them taking on the breadwinner responsibility. Hence, the affected men and women from the different areas of unemployment levels will be demoralised to perform their job function, as the job that they currently doing is only an end to a mean. This can create a heightened sense of depression within the affected people creating a snowball effect in terms of the individual's ability to perform his or her work optimally as Erdogan et al. (2012) has shown that life satisfaction is directly proportional to employee's performance at work.

The effects of fear of job insecurity and its impact on work efficiency were investigated and the data analysis revealed that employed respondents in the region with a low rate of unemployment (83.7% of respondents) feared losing their jobs and hence, did not take the initiative to propose any new methods for improving productivity at their workplace in comparison with 67.2% of respondents in the region with a high rate of unemployment. There was a high percentage of male respondents (90.9% of the total male respondents) as opposed to 79.3% of the total female respondents in the region with low unemployment levels that were fearful of losing their jobs and therefore did not want to risk their employment by proposing alternative method that could increase productivity due to risks of failure. The region with high unemployment was found to have a contrasting effect with the region with low unemployment in that there were more female respondents (77.8% out of the total female respondents in the region) than male respondents (52.0% out of the total male respondents in the region).

The fear of losing employment was found to be greater in the region with low employment levels than the region with high unemployment levels. This fear maybe due to societal judgement on individuals not having employment in the region with low unemployment as opposed to the region with high unemployment where unemployment is a norm within the community. This finding does not support Pérez-Eisenbarth's (2014) argument that unemployment can be used as a mechanism to discipline employees to improve productivity but shows that fears of unemployment may result in a decrease in productivity as employed individuals tend to play it safe and do not take risks, in attempt to improve productivity.

The effects of fear of job loss between co-workers that are sole supporters was investigated and the results illustrated that there was job security fear amongst employed individuals that are breadwinners within the workplace for both regions, with the region of low unemployment levels having a high percentage of participants (83.7%) than the region with high unemployment levels (62.1%), who indicated their co-worker expressed fears of unemployment. Fear of employment uncertainty amongst co-workers is unavoidable due to rising level of unemployment in the country, resulting in many employed people indirectly experiencing the psychological effect of unemployment via the cross-over effect arising from either their close family or friend falling prey to unemployment. This has a spill-over effect in the work domain creating fear of job insecurity in the work environment which can negatively impact on productivity at work.

According to Laschinger and Read (2017), psychological wellbeing is essential to ensure a positive work environment which will contribute to productive employees.

The spill-over effect of partner's unemployment on the employed individual's work performance was explored and the outcome of the survey revealed that employed individuals residing in the region with high unemployment were more susceptible to the crossover effects of stress, anxiety and depression caused by their unemployed partner. This had an adverse effect on their performance at work due to spill-over effect from the home domain into the work domain. A larger percentage of the total female respondents (80.6%) in the region with high unemployment indicated that their job performance was affected by their partner's unemployment as opposed to the total percentage of male respondents (68%). Regarding the region of low unemployment, there was a 1.8% difference between the total male participants and female participants responses who felt their work performance was negatively impacted due to the problems associated with their partner's unemployment. This finding concurs with Baranowska-Rataj and Strandh (2017) that unemployment experienced in a relationship due to one individual in the relationship becoming unemployed can have devastating consequences on the mental wellbeing of the employed individual in the relationship. However, the finding goes one step further and suggest that the problems due to an employed individual's unemployed partner has severe consequences on the employed individual to optimally function at work. This is detrimental to productivity and work morale which is harmful to the company's competitive advantage in its operating environment.

The effects of job insecurity experienced by the employed revealed that fears of job insecurity were rife in both regions (> 70 %), based on the participant's responses across all demographics. This outcome validates that people are interconnected with their surroundings and changes in the macro-environment has a ripple effect on the micro-environment. The current high levels of unemployment affect all employed individuals either directly (through previous experience of being unemployed) or indirectly (through family, friend, or communities) which resonates fear of job insecurities at the workplace. According to Mosca and Bordelon (2017), employee morale deteriorates when employed individuals experience job insecurity. This deterioration in morale can be crippling to productivity and inhibit overall growth.

5.4.2 Key findings to hypothesis three

The overall finding suggest that employed individuals are perceptive of the unemployment rate in the country and their region. This induces a sense of fear of job security in employed individuals both externally (outside the workplace by their unemployed friend, families, and unemployed people at large) and internally (amongst their co-worker's sense of job insecurities), resulting in them not reaching their full potential at the workplace due to risks that need to be taken to maximise the associated benefits to both the employed individuals and the organisation at large. Fears of job insecurity within employed individuals had contributed to demoralisation at the workplace. Hence, work performance was adversely affected due to many employees playing it safe to ensure job security.

Many employed individuals in the toll industry indicated that they were forced, due to circumstance, to take up jobs through necessity and not by choice to ensure their families sustainability due to the unemployment situation in the country. This is detrimental to productivity and workplace morale.

On average, female participants, based on their responses in the toll industry, experienced a greater sense of fear of job loss in the region with high unemployment levels in comparison with their male counterparts. However, male participants, based on their responses, have shown a greater tendency of fear towards job loss in the region with low unemployment in comparison with their female counterparts.

Unemployment fears arising from societal expectations, unemployed partners, family, and friends due to the crossover effect that spill-over into the work domain creating job insecurities, decreasing productivity and efficiencies of the employed in the toll industry has validated hypothesis $H_{3.0}$ i.e. ***the morale (dependent variable) of the employed in the Toll Industry is affected by the psychological consequences of unemployment (independent variable)***. Therefore, the null must be rejected.

5.5 Summary of discussions of results

The literature and data analysis which formed the basis of the discussions revealed that unemployment adversely affects the mental state, wellbeing, and life satisfaction of employed individuals. The finding suggested that men were more affected by unemployment in areas with low unemployment rates, which could be due to societal pressures relating back to orthodox norms. However, the findings suggest that in areas with elevated unemployment levels, employed women are worse off in terms of the mental costs of unemployment as opposed to their male counterparts, as more women are taking on the financial burden to provide for their families. In general, the data suggested elevated levels of stress, anxiety, and depression (SAD) based on the participant's responses. Fears of employment uncertainty by employed individuals was found to negatively affect work morale. This had a knock-on effect on work performance and productivity. Overall, the findings confirmed the validity of hypotheses **H_{1.0}**, **H_{2.0}** and **H_{3.0}**.

To improve validity and reliability of the research objectives, the study utilised triangulation techniques. Hence, the findings were reinforced by the literature review undertaken in chapter 2.

The inferential statistics brought into focus the applicability of the conceptual model by revealing the interdependence of the variables which can be described in terms of the proposed theoretical models. The mental wellbeing of the employed was found to be dependent on the impact unemployment has on the employed individual's perceived societal role, crossover effects arising from the employed individual's unemployed family, friends and community, the spill-over effect from family domain into the work domain.

The next chapter provides the key findings together with the implications of the research to which recommendations are provided to mitigate the psychological impact of unemployment endured by the working class. The known constraints to the generalisability of the research are also conferred.

CHAPTER 6: CONCLUSION, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

6.1 Introduction

This chapter presents the key outcomes of the study that emerged from the discussions of the 3 hypotheses in the previous chapter, the implications of the findings, recommendations mitigating the challenges faced by employed individuals in the toll industry arising from varying unemployment levels detrimental to morale at the workplace are provided for interested and affected parties, recommendations for future studies that developed during the course of this study are proposed and limitations of the study documented. Lastly, the chapter concludes with an overall summary.

6.2 Conclusion

Unemployment from a macro perspective was found to have impacted the psychological wellbeing and life satisfaction of employed individuals based on societal norms. In the region with low unemployment, more male respondents were shown to experience stress, worries and despair due to their sole provider responsibility. Traditional role reversal was observed for the region with high unemployment level whereby, women played the role as financial provider for their families which was detrimental to their state of mind. In general, unemployment was found to have varying degrees of impact on the mental wellbeing of employed men and women for the different regions.

Overall, the stress, anxiety, and depression (SAD) levels were raised based on the participant's responses showing a greater tendency towards agreeing to strongly agreeing to questions pertaining to breadwinner's mental state, poor economic outlook, financial distress and poor quality of life effect on an unemployed partner.

The inferential statistical analysis showed that the latent variables were interconnected, confirming the rationality of the conceptual model. The psychological welfare of the employed was found to be dependent on the impact unemployment had on the employed individual's family, friend, and work domains caused by the crossover and spill-over effect.

The morale of the employed was found to be dependent on the impact unemployment has on the employed family domain which spilled over into the employed work domain. This was further compounded by interactions with other employees at the workplace who

were experiencing job insecurity due to previously being unemployed or via the effects unemployment had on their families.

6.3 Implications of finding

Employers need to take cognisance of the issues triggered by unemployment impacting their employees from a psychological level as these psychological consequences have a direct impact on morale, performance, productivity, and efficiency at the workplace. In order to minimise the psychological effects of unemployment arising from the external and internal environments shaping the employees' mental state impacting on performance, senior management need to create a culture that encourages innovation throughout the workplace and eliminates the sense of job insecurity by effective communication with their employees. This will minimise the sense of fear pertaining to employment uncertainty amongst employees and will increase the overall morale within the workplace.

Given that many of the toll employees only have matric, the industry should try and promote broad skills development, as this will facilitate in improving productivity and ensure employment sustainability of employees.

Employees, especially youth, should be encouraged to further their studies through bursary programmes as this will help build intellectual capital that would give the organisation a competitive advantage over their rivals within the industry. Education will empower employees, give them confidence in their abilities and alleviate some of the fears associated with job insecurity.

6.4 Recommendations emerging from the study

Based on findings from the data analysis in chapter 4 together with the discussions for all three hypotheses in sections 5.2, 5.3 and 5.4, the recommendations provided are structured and tailored for the employed individuals, senior management and policy makers of the organisation.

For employed individuals the following recommendation are provided:

- (a) To minimise the psychological consequences of unemployment on employed individuals and the associated impact it has on their family, employed individuals need to communicate with their family members and let them know about their

concerns and fears arising from the unemployment. Communication will assist in reducing the pressures, fears and worries experienced.

- (b) Employed individuals should not succumb to societal pressure by letting society dictate what their roles and responsibilities should be. Employed men and women need to break away from societal fears and pressures. Couples should work together to ensure sustainability of their family. Unemployed men should not be pressured in feeling inadequate as they cannot financially provide for their family if their partners are fulfilling this responsibility. These men should help their partners by taking care of the household or/and other responsibilities to minimise the stress, worries and strain felt by their employed partners.
- (c) Employed people should try to further their studies by studying part time to obtain a tertiary qualification as this will open more employment opportunities than just having a matric. This is especially applicable to foundational employees at the toll plazas. This will alleviate the stress and fears associated with unemployment as tertiary education will empower these individuals, bolster their confidence and ensure that they have the essential tools to find employment should they find themselves unemployed.
- (d) Those employed individuals that are unhappy with their current employment as it was not by choice but out of necessity, should speak to a career councillor or coach and put a road map in achieving their desired job opportunity by acquiring the necessary qualification, training and skills after work and on weekends. This will ensure that they are still able to provide for their family's current financial needs while being able to attain the necessary requirement to obtaining their future desired job.
- (e) To maximise employed individuals children's chances of future employment and to reduce the associated mental stress, strain and anxiety experienced by employed individuals due to the country's poor employment outlook regarding their children's future, employed individuals need to encourage their children to excel in academics at school as this will facilitate in their children securing sponsorship

for tertiary education which will ultimately give their children a competitive advantage over their rivals in securing employment.

- (f) Employed individuals should explore other avenues in subsidising their family's income by considering for example opening a Spaza shop, hot dog stand at the local market, arts and crafts that can be manufactured at home or any other micro business that is not capital or resource intensive. This will reduce fears of unemployment, stress of being unemployed experienced by unemployed family members and bring the family closer.
- (g) Employed individuals should save whatever they can to cater for the unforeseen event should they fall victim to unemployment. This will help minimise the stress, anxiety and depression experienced by employed individuals arising from the effects of unemployment either directly or indirectly and further give employed individuals piece of mind that they have some money set aside should they encounter a rainy day.

For the organisation the following are recommended:

- (a) The organisation needs to ensure that toll employees are reassured that their services are required especially considering the current economic hardship. Showing employees that they are valued by the organisation instils job security. The organisation needs to further set up a motivational tone in the workplace, empowering employees with a sense of well-being in the work environment, thereby eliminating the fear of employment uncertainty.
- (b) Senior management should cultivate a safe and positive work atmosphere. This will be perceived by the toll employees which will eliminate fears of job insecurity amongst co-worker, and be conducive in increasing morale at work.
- (c) Employees should be given the platform to prove their abilities by getting them to spearhead distinct task at work. This will let employees know that management has trust in their skills and abilities. Furthermore, they should be given the latitude to oversee the task assigned to them without being micromanaged but at the same time, given the assurance that if they need any guidance or assistance that they

can always ask for help and it would be provided. This will ensure that the most efficient methods are adopted which will yield the highest results.

- (d) Organisations should implement family-friendly policies to facilitate in assisting their employees realise their family roles. For example, shift rotation can be used for employees who have family responsibilities during working hours by allowing them to attend to their family responsibilities during the morning hours and fill in the time taken during the day by working in the evening shift.
- (e) Communication channels with employees should be kept open and employees should be made aware that they are welcome to discuss any concerns that they might have about their employment position within the organisation.
- (f) A future timeline of the organisation's projects should be made available to all employees together with the organisation's financial standing. This information will facilitate in providing employees with a sense of security that the company will retain them in the foreseeable future.

6.5 Recommendations for future studies

Given the time constraints for this dissertation, not all aspects of the phenomena could be explored, creating voids in the literature, thereby limiting the full comprehension of the psychological consequences of unemployment on the employed group of individuals. This paves the way for further studies to investigate, explore and determine the following:

- (a) Understanding the psychological consequences of unemployment on population with a diverse spread of job positions, education level and income bracket, since the psychological consequences of unemployment on the employed with a diverse spread of job positions and income brackets in the toll industry could not be completely understood due to the skewness of job positions and education levels within the toll industry as majority of the respondents were foundational level employees with matric.
- (b) The impact unemployment has on employed individuals with different personality traits. Furthermore, how do the SAD levels on the employed with different personality trait varies amongst each of different personality traits.

- (c) Reasons as to why female employees display greater empathy towards people that are unemployed in areas with a high unemployment rate and less empathy for unemployed people in areas with a low unemployment rate.
- (d) The implications of stress, anxiety and depression triggered by unemployment experienced by the employed on their family.
- (e) The long-term effects of stress, anxiety and depression experienced by breadwinners who failed to provide tertiary education for their children and the impact it has on their quality of life.
- (f) Reproducing this study in a metro such as eThekweni with a more diverse target population to determine if the psychological consequences of unemployment on the employed differs with the finding of this study.
- (g) Repeating this study to determine how this phenomenon affect the different race groups of employed individuals as all race groups in this study was not represented as most respondents were of African and Indian origin.

6.6 Limitations of the study

The research scope of this dissertation was restricted to a South African setting, with emphasis placed on employed individuals at the toll plazas situated in northern region of KwaZulu-Natal, as a result the outcomes observed in the data analysis maybe only applicable in this context. The findings maybe projected to similar type organisations but with caution as the outcomes identified in this research was obtained using participants from the toll industry only.

The research study was cross-sectional and hence the responses gathered from the respondents were applicable for a particular instant in time. The study is centred around the psychological consequences of unemployment, which is dynamic, as the unemployment rate fluctuates, and this has an impact on people's perceptions. It would have been preferable to conduct a longitudinal study to determine the impact unemployment has on employed people's responses over a longer time span but due to time constraints this was not possible.

The 5-factor rating Likert scale that was utilised for most of the questions in the questionnaire lacked variability with its selection criteria ranging from strongly agree to strongly disagree. Therefore, the participants could not provide the degree of variability pertaining to the intensity of the level of stress, anxiety and depression that they are experiencing with much accuracy. This had an impact in adequately determining the level of SAD for each of the respondents.

Other limitations were that the demographics did not represent all race groups, there was not enough diversification in the educational level and professions, which could have influenced the responses as the respondents in this study may incur similar perceptions when it came to unemployment and the impact it has on their mental state.

Lastly, due to time limitations in conjunction with resource constraints the research outcomes may only skim the surface of this phenomena and hence, additional research may need to be undertaken to gain more depth.

6.7 Summary

This research study examined the effects unemployment had on the mental state and overall wellbeing of the employed in the toll industry together with the ramifications it has on employee morale. The outcomes presented in this chapter emerged from the discussions in chapter 5, which found that overall unemployment was detrimental to mental wellbeing of the employed and had consequence to work morale. However, the finding further suggests that the level of unemployment influences the intensity of the psychological consequence unemployment has on working men and women.

The implications of the findings suggest that employers need to be cognisant of the issues stemming from unemployment, impacting their employees on a psychological level, as these psychological consequences directly impact morale, performance, productivity, and efficiency at the workplace.

Recommendations were provided, structured and tailored for employed individuals and organisations to either eliminate or minimise the adverse effects unemployment was found to have on employed individuals as identified in the discussions of the three hypotheses of this research study.

Recommendations for future studies were proposed and limitations encountered arising from a multitude of issues were discussed, as not all aspects of the phenomena could be

explored creating voids in the literature thus limiting the full comprehension of the psychological consequences of unemployment on the working class.

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APPENDICES

Appendix A: Informed Consent

UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

Dear Respondent,

MBA Research Project

Researcher: Seekandar Mahomed (084-2082473)

Supervisor: Christopher Chikandiwa (031-260 8883)

Research Office: Ms P Ximba 031-2603587

I, Seekandar Mahomed an MBA student, at the Graduate School of Business and Leadership, of the University of KwaZulu-Natal. You are invited to participate in a research project entitled A Cross Sectional Quantitative Study on The Psychological Consequences of Unemployment on The Employed Class in The KwaZulu-Natal Toll Industry Northern Region, South Africa.

The aim of this study is to:

- (a) To Identify the psychological consequences of unemployment on the employed class in the Toll Industry.
- (b) To understand whether the level of stress, anxiety and depressions increases on the employed due to the high unemployment rate.
- (c) To evaluate the impact the psychological consequences of unemployment has on the morale of the employed in the Toll Industry.
- (d) To suggest and propose recommendations to mitigate the challenges faced by the employed arising from unemployment

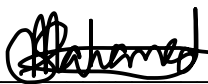
Through your participation, I hope to understand Psychological consequences of unemployment on the employed class in the KZN Toll Industry. The results are intended to contribute in providing policy makers, current and future employers with pertinent information and insight for creating a better environment that will assist in minimising the mental, physical, and emotional stresses on the employed.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey/focus group. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business and Leadership, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about **10** minutes to complete. I hope you will take the time to complete this survey.

Sincerely

Investigator's signature  Date 24/07/2017

This page is to be retained by participant

UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

MBA Research Project

Researcher: Seekandar Mahomed (084-2082473)

Supervisor: Christopher Chikandiwa (031-260 8883)

Research Office: Ms P Ximba 031-2603587

CONSENT

I..... (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I hereby consent / do not consent to participating in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT: _____ DATE: _____

.....

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Appendix B: The Research Instrument

QUESTIONNAIRE

Job description	Toll Collector	
	Supervisor	
	Administrator	
	Manager	

Gender	Male	
	Female	

Marital Status	Single	
	Married	
	Divorced	
	Cohabiting	

Age (years)	18-25	
	26-35	
	36-45	
	46-55	
	older than 55	

Education	Matric	
	Post Matric Certification	
	Diploma	
	Degree	
	Post Graduate qualification	

Race	African	
	Indian	
	Coloured	
	White	
	Other	

Please indicate the extent to which you agree or disagree with the following statements given the current unemployment rate in South Africa		Strongly Agree	Agree	unsure	Disagree	Strongly Disagree
1.	I am the breadwinner /major supporter of my family's needs and hence feel overwhelmed as none of the other members in my family could find work in the past six months.					
2.	I am depressed as all my family members that were seeking work could not find work in the past six months.					

Please indicate the extent to which you agree or disagree with the following statements given the current unemployment rate in South Africa	Strongly Agree	Agree	unsure	Disagree	Strongly Disagree
3. I do not use methods other than the methods proposed by my superior to perform my work function even though my methods might be more efficient and increase productivity, as I am scared that I might lose my job given the uncertainty associated with the new methodology.					
4. I constantly worry that my family/ friends will not find work and hence their living standards will not improve.					
5. I am in constant fear of losing my job and not being able to find work opportunities should I lose my job.					
6. I do not get much sleep worrying about the future of my family given the current levels of unemployment.					
7. I feel depressed knowing there are limited employment opportunities.					
8. I fear my quality of life will not improve as my partner is a victim of unemployment.					
9. I feel a sense of worthlessness as I do not have any control of my employment situation to improve my social standing.					
10. Many of my co-workers have expressed their fear of losing their jobs as they are breadwinners.					
11. I have anxiety thinking about the future of my family members ability to earn a living given the unemployment rate.					
12. My social life has been adversely affected as most of my friend are unemployed.					
13. I fear that I won't be able to send my children to a tertiary institution as I barely make ends meet as the sole supporter.					
14. I constantly feel stressed out given the sole responsibility to provide for my household.					
15. I try to work overtime as much as possible in order to provide the bare essentials for my family given that my partner is unemployed, and this makes me feel anger towards my partner.					
16. I feel sad when I see people that are looking for jobs and cannot find any employment opportunities.					
17. I fear that my love ones will end up in poverty as they won't be able to find work.					

Please indicate the extent to which you agree or disagree with the following statements given the current unemployment rate in South Africa	Strongly Agree	Agree	unsure	Disagree	Strongly Disagree
18. I feel depressed thinking that once I am unable to work my family will not have any shelter as none of them are able to find work.					
19. I cannot focus on my work worrying how I will be able to cover all our bills (electricity, water etc).					
20. I prefer to be at work as this allows me to forget about my problems.					
21. I find that my problems associated with my partners unemployment adversely affects my performance at work.					
22. My current job is not what I intended to do, but because of my circumstance as I am the sole supporter of my family, I have no alternative but to do this job.					
23. I fear my kids will have to take the first work opportunity that presents itself to avoid unemployment.					
24. I feel depressed thinking of the employment outlook in the country					
25. Many of the people that are of working age in my neighbourhood and where actively seeking employment are still unemployed and are now resorting to alcohol or other types of substance abuse, hence I fear the same thing will happen to my family members.					
26. I am afraid that if my family members/friends that are unemployed, do not find jobs they will lose their self-confidence.					
27. The current unemployment in the country has negatively impacted on my wellbeing and quality of life.					
28. It took me a long time to find work and as a result I fear losing my job.					

- Refer to Section 3.7, Table 3.2 Question-Variable Mapping

Appendix C: Ethical Clearance



18 July 2017

Mr Seekandar Mahomed (201293685)
Graduate School of Business & Leadership
Westville Campus

Dear Mr Mahomed,

Protocol reference number: HSS/0802/017M

Project title: A Cross Sectional Quantitative Study On The Psychological Consequences Of Unemployment On The Employed Class In KwaZulu Natal Toll Industry Northern Region, South Africa

Full Approval – Expedited Application

In response to your application received on 15 June 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and FULL APPROVAL for the protocol has been granted.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Mr Christopher Chikandiwa
Cc Academic Leader Research: Dr Muhammad Hoqe
Cc School Administrator: Ms Zarina Bullyraj

Humanities & Social Sciences Research Ethics Committee

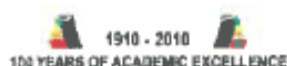
Dr Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

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Appendix D: Turnitin Report Summary

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