

**KNOWLEDGE AND ATTITUDES OF UNIVERSITY OF LIMPOPO'S
POSTGRADUATE STUDENTS TOWARDS MENTAL ILLNESS**

BY

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Date: **2018**

DECLARATION

I declare that **Knowledge and Attitudes of University of Limpopo's Postgraduate Students towards Mental Illness** hereby submitted to the University of Limpopo, for the degree of Master of Arts in Clinical Psychology has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

Mokwebo Jackson (Mr)

Date

DEDICATION

This dissertation is dedicated to the following individuals:

- My mother, Mrs Joyce Mokwebo,
- My late father, Mr Torch Mokwebo,
- My late grandmothers, (Lydia Raisibe Mokwebo, and Thokozile Gedrude Mathlanya),
- My sister, Mrs Innocentia Mahlangu, and
- My late brother, Evans Mokwebo.

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- To my partner Mpho, thank you for always being there for me.
- The Department of Psychology, University of Limpopo, for professional and personal growth.
- To the students, thank you for being part of the study. Without you the study was not going to be possible.
- Thanks to everyone who assisted directly and indirectly. May the Good Lord bless you abundantly!

ABSTRACT

Extensive research on the knowledge and attitudes of students regarding mental illness has been conducted among university students globally. Some of these studies have indicated that students' attitudes are influenced by a number of factors such as gender, year of study and contact with people with mental illness. In addition, university students' attitudes towards people with mental illness were found to vary based on the course that they were enrolled in. The present study sought to explore the knowledge and attitudes of university postgraduate students towards mental illness. A survey research design was adopted. Using systematic random sampling, 143 students enrolled for an honours degree in the Faculty of Humanities at the University of Limpopo were selected and enlisted to participate in the study. The students completed a self-reported questionnaire including the Mental Health Knowledge Schedule (MAKS) and Attitude Scale for Mental Illness (ASMI). The results of the study indicate that nearly half of students (49.7%) have adequate knowledge about mental illness. Most students (mean = 38.55) were able to identify mental disorders and were familiar with various treatment modalities. Gender, study course, and previous contact with people with mental illness had no effect on the students' knowledge of mental illness. A further exploration revealed that 50.3% of the students displayed favourable attitudes towards people with mental illness. 31.5% of the students reported having previous contact with people with mental illness. A majority (60%) of students who had previous contact with someone with mental illness displayed favourable attitudes compared to students (46%) with no previous contact. Lastly, there was no relationship between the students' knowledge about mental illnesses and their attitudes. The results suggest that educational and awareness campaigns aimed at improving students' knowledge about mental illness and attitudes should promote contact with the mentally ill. However, the contact should be the type that will cultivate positive attitudes.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF ABBREVIATIONS AND ACRONYMS.....	x
LIST OF TABLES	xi
LIST OF FIGURES.....	xii
Chapter 1: General Orientation of the Study	1
1.1 Introduction	1
1.2 Research problem.....	2
1.3 Aim of the study	3
1.4 Research objectives.....	3
1.5 Hypotheses.....	3
1.5.1 Knowledge hypotheses:	3
1.5.2 Attitude hypotheses:	4
1.6 Significance of the study	4
1.7 Operational definition of concepts.....	5
1.7.1 Knowledge.....	5
1.7.2 Attitude	5
1.7.3 Mental illness.....	5
1.7.4 Postgraduate student	6
1.8 Chapter outline	6
1.9 Summary	6
Chapter 2: Literature Review and Theoretical Framework	7
2.1 Introduction	7
2.2 Global trends of mental illness.....	7
2.3 Knowledge of mental illness	8
2.4 Attitudes towards people with mental illness.....	10

2.4.1 Variables that form the abstraction attitude	10
2.4.1.1 <i>Separatism</i>	10
2.4.1.2 <i>Stereotyping</i>	11
2.4.1.3 <i>Restrictiveness</i>	11
2.4.1.4 <i>Benevolence</i>	11
2.4.1.5 <i>Pessimistic prediction</i>	11
2.4.1.6 <i>Stigmatisation</i>	12
2.4.2 Contact and attitudes towards people with mental illness	13
2.4.3 Faculty differences in attitudes towards people with mental illness.....	14
2.4.4 Gender differences and attitudes towards people with mental illness.....	15
2.4.5 Culture and mental illness from an Afrocentric perspective	16
2.5 Theoretical framework: Labelling Theory	17
2.6 Summary	18
Chapter 3: Methodology	19
3.1 Introduction	19
3.2 Research design	19
3.3 Population and setting	20
3.4 Sampling.....	20
3.5 Data collection instruments.....	21
3.5.1 Section A: Biographical data	21
3.5.2 Section B: Mental Health Knowledge Schedule (MAKS)	21
3.5.3 Section C: Attitude Scale for Mental Illness instrument (ASMI).....	21
3.6 Procedure	23
3.7 Data analysis	23
3.8 Ethical considerations	24
3.8.1 Permission to conduct the study.....	24
3.8.2 Informed consent.....	24
3.8.3 Confidentiality and anonymity.....	24
3.8.4 No harm to participants	25
3.9 Summary	25

Chapter 4: Results.....	26
4.1 Introduction	26
4.2 Non-response to survey questionnaires.....	26
4.3 Approach to data analysis.....	26
4.4 Reliability testing.....	27
4.5 Demographic characteristics.....	27
4.6 Mental Health Knowledge Schedule (MAKS).....	30
4.6.1 Descriptive presentation of the participants' results (knowledge)	31
4.6.2 Frequency tables presentation of the participants' results (knowledge)	33
4.7 Attitude Scale for Mental Illness (ASMI).....	35
4.7.1 Descriptive presentation of the participants' results (attitudes)	36
4.7.2 Frequency tables presentation of the participants' results (attitudes)	37
4.8 Hypotheses.....	40
4.8.1 Hypothesis 1.....	41
4.8.2 Hypothesis 2.....	42
4.8.3 Hypothesis 3.....	42
4.8.4 Hypothesis 4.....	44
4.8.5 Hypothesis 5.....	45
4.8.6 Hypothesis 6.....	47
4.8.7 Hypothesis 7.....	48
4.9 Summary	49
Chapter 5: Discussion	50
5.1 Introduction	50
5.2 Knowledge of mental illness	50
5.3 Attitudes towards mental illness.....	51
5.3.1 Cultural influence.....	53
5.3.2 Media portrayal.....	54
5.4 Knowledge, attitudes and gender	56
5.5 Knowledge, attitudes and study course	56
5.6 Knowledge, attitudes and contact	57

5.7 Association between knowledge and attitudes	59
5.8 Summary	59
Chapter 6: Summary and Conclusion.....	60
6.1 Summary of the findings	60
6.2 Limitations of the study	61
6.3 Recommendations	61
REFERENCES.....	62
APPENDICES	74
Appendix 1: Questionnaire	74
Appendix 2: Consent letter to participants.....	79
Appendix 3: Consent form.....	80
Appendix 4: Letter of permission to the dean of the Faculty of Humanities.....	78
Appendix 5: Ethical clearance	80
Appendix 6: Gatekeeper’s permission to conduct the study.....	81
Appendix 7: Krejcie and Morgan’s (1970) sample size determination table	82

LIST OF ABBREVIATIONS AND ACRONYMS

ASMI	Attitude Scale for Mental Illness
DALY	Disability-Adjusted Life-Years
MAKS	Mental Health Knowledge Schedule
SA	South Africa
SASH	South African Stress and Health Survey
TREC	Turfloop Research Ethics Committee
WHO	World Health Organization
WPA	World Psychiatric Association
YLD	Years Lived with Disability

LIST OF TABLES

Table 4:1. Internal consistency of all variables	27
Table 4:2. Participant's age	28
Table 4:3. Participant's gender	28
Table 4:4. Participant's school affiliation	29
Table 4:5. Contact with someone with mental illness	29
Table 4:6. Religious affiliation	30
Table 4:7. Descriptive table of the participants' knowledge	31
Table 4:8. Descriptive table of the treatment of mental illness (treatment of mental illness).....	31
Table 4:9. Descriptive table of the identification of disorders	32
Table 4:10. Frequency table of the students' knowledge	33
Table 4:11. Frequency table of the students' knowledge (gender)	34
Table 4:12. Frequency table of the students' knowledge (school)	34
Table 4:13. Frequency table of the students' attitudes (contact).....	35
Table 4:14. Descriptive table of the students' attitudes.....	36
Table 4:15. Frequency table of the students' attitudes	37
Table 4:16. Frequency table of the students' attitudes (gender)	38
Table 4:17. Frequency table of the students' attitudes (school).....	39
Table 4:18. Frequency table of the students' attitudes (contact).....	40
Table 4:19. T-test scores of students' knowledge (gender)	41
Table 4:20. T-test scores of knowledge (school)	42
Table 4:21. T-test scores of knowledge (contact)	43
Table 4:22. T-test scores of attitudes (gender)	44
Table 4:23. T-test scores of attitudes (school)	46
Table 4:24. T-test scores of attitudes (contact).....	47
Table 4:25. Pearson correlation test of students' knowledge and attitudes	48

LIST OF FIGURES

Figure 2:1. A hierarchical ordering of the world in African cosmology 17

CHAPTER 1: GENERAL ORIENTATION OF THE STUDY

1.1 Introduction

Mental illness continues to burden the world, particularly the African continent. It significantly contributes to the global disease burden that is expected to increase over the coming decades (Youssef et al., 2014). The World Health Organization (2015) reported that the annual prevalence of mental health challenges was very high, with approximately 450 million people suffering from mental or behavioural disorders worldwide. 154 million people suffer from depression, 25 million people from schizophrenia, 91 million people from alcohol use disorders, while 15 million suffer from drug use disorders (World Health Organization, 2015).

There has been growing evidence of the importance of mental health for economic, social and human capital. Despite the evidence, people with mental illness are faced with difficulties. Negative publicity and stigmatisation are among the difficulties faced by people with mental health problems (Sadik, Bradley, Al-Hasoon, & Jenkins, 2010). Such individuals are often discriminated against, violated, and neglected by the general public (Kosyluk et al., 2016). This often leads them to isolate themselves from friends, family and community. It is, therefore, imperative to investigate factors contributing towards negative attitude and/or stigmatisation of people with mental illness.

There are many such factors. For example, people with mental illnesses are perceived to be unpredictable and dangerous (Schomerus et al., 2012). Jyothi, Bollu, Ali, Chaitanya, and Mounika (2015) argued that people's negative attitudes may be due to lack of knowledge. With this in mind, this study sought to explore the knowledge and attitudes of postgraduate students at the University of Limpopo towards people with mental illness.

1.2 Research problem

Negative attitudes towards mental health are on the rise among university students (Hunt & Eisenberg, 2010). Attitudes in Western countries vary from attitudes in non-Western countries. Stigmatisation was reported to being less severe in the Non-western countries (Kurihara, Kato, Sakamoto, Reverger, & Kitamura, 2000). Therefore, these negative attitudes could be attributed to a lack of knowledge and awareness among university students (Jyothi et al., 2015). Abdullah and Brown (2011) also argued that cultural and religious beliefs could influence students' knowledge and attitudes towards people with mental illness and help to explain the discrepancy.

Extensive research on knowledge and attitudes of students has been conducted among university students globally (Antoniadis et al., 2016; Aruna et al., 2016; Vijayalakshmi, Reddy, Math, & Thimmaiah, 2013). Some of these studies have suggested that students' attitudes are influenced by demographic variables such as gender, year of study and contact with people with mental illness (Antoniadis et al., 2016), while others have indicated that social distance towards the mentally ill was found to be higher amongst students as a result of lack of knowledge and awareness (Aruna et al., 2016). In addition, one study found that university students' attitudes towards people with mental illness varied based on the course that they were enrolled in (Vijayalakshmi et al., 2013). Aruna et al. (2016) also found that women were likely to have favourable attitudes than men. On the other hand, an intervention study by da Rocha Neto, Rosenheck, Stefanovics, and Cavalcanti (2017) produced contradictory results, showing no significant difference in attitudes towards mental illness among university students in Brazil.

South African research on students' knowledge and attitudes towards mental illness includes, among others, a study by Stones (1996) in the Eastern Cape and another by Samouilhan and Seabi (2010) at the University of the Witwatersrand, The two studies revealed that limited or incorrect mental health knowledge results in negative attitudes towards people with mental illness. However, there is insufficient literature available on the knowledge and attitudes of students towards mental illness among South African university students, particularly among postgraduate students.

In Wahl, Susin, Lax, Kaplan, and Zatina's (2012) view, there exists a need to conduct studies on attitudes towards mental illness among the youngest generation of citizens.

Therefore, this study aimed at exploring variables contributing to postgraduate students' knowledge and attitudes towards mental illness.

1.3 Aim of the study

The aim of the study was to explore the knowledge and attitudes of University of Limpopo postgraduate students towards mental illness.

1.4 Research objectives

The objectives of the study were:

- 1) To assess levels of knowledge of mental illness by postgraduate students of the University of Limpopo.
- 2) To explore attitudes of University of Limpopo's postgraduate students towards people with mental illness.
- 3) To compare postgraduate students' knowledge and attitudes towards mental illness on the basis of gender, field of study, and prior contact with the mentally ill persons.
- 4) To establish if there is a relationship between students having knowledge about mental illness and attitudes towards mental illness.

1.5 Hypotheses

1.5.1 Knowledge hypotheses:

- 1) H₀: There are no gender differences in university students' knowledge of mental illness.
H₁: There are gender differences in university students' knowledge of mental illness.
- 2) H₀: There are no differences in knowledge between university students studying different courses.
H₁: There are differences in knowledge between students studying different courses.

- 3) H₀: There are no differences in knowledge between university students with prior contact with the mentally ill and students without prior contact with the mentally ill.
H₁: There are differences in knowledge between university students with prior contact with the mentally ill and students without prior contact with the mentally ill.

1.5.2 Attitude hypotheses:

- 4) H₀: There are no gender differences in university students' attitudes towards mental illness.
H₁: There are gender differences in university students' attitudes towards mental illness.
- 5) H₀: There are no differences in attitude towards mental illness between university students studying different courses.
H₁: There are differences in attitude towards mental illness between university students studying different courses.
- 6) H₀: There are no difference in attitudes towards mental illness between university students with prior contact with the mentally ill and students without prior contact with the mentally ill.
H₁: There are differences in attitudes towards mental illness between university students with prior contact with the mentally ill and students without contact with the mentally ill.
- 7) H₀: There is no relationship between knowledge and attitudes between university students.
H₁: There is a relationship between knowledge and attitudes between university students

1.6 Significance of the study

A study of this nature could:

- a) contribute to understanding the knowledge of university students with regards to mental illness and the attitudes that university students attach to mental illness;

- b) inform programmes that seek to educate university students about mental illness;
- c) shed light on factors that influence students' help-seeking behaviours; and,
- d) serve to inform mental health programmes aimed at university students.

1.7 Operational definition of concepts

1.7.1 Knowledge

Knowledge is "familiarity, awareness or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning" (Hornby, 2009, p. 81). For this study, knowledge will be defined as an awareness or understanding of, in this case, mental illnesses.

1.7.2 Attitude

Attitude is a relatively enduring organization of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols (Hogg & Vaughan, 2005). Katz (1960) defined attitude as "the predisposition of an individual to evaluate some symbol or object or aspect of his world in a favourable or unfavourable manner" (p. 182). For this study, attitude will be defined as negative or positive responses, in this case, toward mentally ill people.

1.7.3 Mental illness

Mental illness is defined as disturbances within the sufferer's emotions, behaviour and cognitive processes, which implies global disturbances in functioning (Hyde, 2011). In the context of this study, mental illness will be understood as emotional, behavioural, and cognitive disturbances that result in significant impairment in daily functioning.

1.7.4 Postgraduate student

A postgraduate student is a student who has obtained a degree from a university, university of technology etc., and is pursuing studies for a more advanced qualification e.g. Honours, masters (Cambridge.Com, 2018). In the context of this study, a postgraduate student will be understood as a student pursuing an honours degree.

1.8 Chapter outline

Chapter one provides an overview of the study, the aims, objectives, and hypotheses. Chapter two is a review of the available literature on knowledge, attitudes, faculty differences, the role of contact and gender differences with regards to the student's knowledge and attitudes towards mental illness and the theoretical framework the study is anchored on. Chapter three is the discussion of research methodology that was used in this study. Chapter four consists of the presentation of the results and lastly, chapter five provides a discussion of the results, the limitations of the study and the recommendation thereof.

1.9 Summary

In this chapter, an introduction to the study was presented. This was followed by the presentation of the research problem, aims of the study, research objectives, and research hypothesis. The significance of the study and definitions of key concepts in the study were also presented. Lastly the outlay of chapters was presented.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter will present a review of the literature relating to the knowledge of mental illness and its correlation with attitudes towards people with mental illness. Firstly, global trends of mental illness will be presented. Secondly, literature on the knowledge of mental illness will be presented. Thirdly, the literature on attitudes towards people with mental illness will be presented including the variables that affect attitude will be discussed. Then the impact of aspects such as contact, educational background, and gender on attitudes towards people with mental illness will be discussed. Furthermore, culture and mental illness from an Afrocentric perspective will be discussed. Lastly, the theoretical framework in which this study is embedded will be explored.

2.2 Global trends of mental illness

Mental illness accounts for a considerable portion of the global disease burden. According to Vigo, Thornicroft, and Atun (2016), mental illness accounts for approximately 32.4% of years lived with disability (YLDs) and 13.0% of disability-adjusted life-years (DALYs). They are also of the opinion that current estimates of the disease burden are not accurate. According to them the burden of mental illness might be underestimated by more than a third. This places mental illness first in global burden of disease in terms of YLDs and level with cardiovascular and circulatory diseases in terms of DALYs. In 2015, global trends estimated that people with depression exceed 300 million, increasing by 18.4% between 2005 and 2015. According to the World Health Organization (2015), depression contributes significantly to global disability, contributing up to 7.5% of all YDLs in 2015. Anxiety disorders were also high on the list. Ranked sixth, it contributed 3.4% of all YDLs. Depression is also a catalyst in suicide deaths, which numbered close to 800 000 per year.

A study done in South Africa (SA) by Trump and Hugo (2006) on barriers preventing effective treatment of South African patients with mental health problems found that the majority of health problems in SA have a psychological origin. Despite the health problems having a psychological origin, the public still does not adequately utilise mental health services available to them. According to Jacob and Coetzee (2018), limited number of studies focusing on the prevalence of mental illness has been conducted in South Africa. The South African Stress and Health Survey (SASH) conducted in 2004 remains the main source of mental health prevalence data for SA data. This study was the first large-scale population-based study of common mental disorders in SA. It showed that the 12-month prevalence of common mental disorders among SA adults was 16.5%, and that the lifetime prevalence for any disorder was 30.3%. According to the study, alcohol abuse (11.4%) was the most prevalent (11.4%) followed by major depression and agoraphobia both seating at (9.8%) (Aon, 2009).

Mental health problems are also prevalent in university students. The prevalence is significantly higher than in the general population (Stallman, 2010). It is believed that about one in five to one in four young people suffer at least one mental disorder in a given year (Patel et al., 2007). The Royal College of Psychiatrists (2003, 2011) predicted that the level of mental health problems in students in the UK would increase because of the presence of more students from different backgrounds attending university and also increasing financial pressures on students associated with funding needed to support them while they study. The experience of mental illness in university can predispose students to various challenges like lower grade point averages, greater risk for dropout, and poorer economic and social outcomes in later life (Kosyluk et al., 2016). These possible outcomes make the current study particularly critical.

2.3 Knowledge of mental illness

Literature has suggested that people around the world are becoming more knowledgeable about mental illness. Schomerus et al. (2012) reported tremendous advancements in the understanding of mental disorders. The advancement in knowledge is not only on the side of professionals in the mental health field but also among the public who have generally experienced some advancement too.

Furthermore, Yousseff et al. (2014) reported improvements in knowledge and attitudes towards mental illness in developed countries, although they noted that lower- and middle-income countries have yet to witness the shift.

There is a possible relationship between good mental health literacy and positive attitudes (Dev, Gupta, Sharma, & Chadda, 2017). Knowledge in the identification of mental disorders can also improve attitudes towards mental illness (Yousseff et al., 2014). It is believed people with greater knowledge about mental illness or experience with mental illness tend to perceive people with mental illness as less gangrenous and are less likely to discriminate against them (Tork & Abdel-Fattah, 2015). Some studies however contradict this notion. A meta-analysis by Schomerus et al. (2012), for example, revealed no correlation between increased public understanding of mental illness and positive attitudes.

University students appear to be knowledgeable in some areas of mental illness and limited in some areas. This is supported by the results of a study by Dev et al. (2017) who investigated awareness of mental disorders among youth in India. Among others, the study found that the overall mental health knowledge of university students was satisfactory, but not adequate in the areas of identification of risk factors, stigmatisation and discrimination. Another study by Hyde (2011) on perceptions of university students in South Africa revealed similar results, where university students knew how people with mental illness look like although struggled with identifying symptoms of various mental illnesses. Furthermore, a study by Youssef et al. (2012) on knowledge and attitudes towards mental illness among students in Caribbean universities indicated that the majority of students agreed that schizophrenia, bipolar disorder and depression were mental illnesses, but far fewer students agreed that drug abuse was a form of mental illness.

Literature has further suggested that the setting of the university appears to play a role in the knowledge about mental illness and attitudes towards mental illness. Momi and Saikia (2016) in their study on Indian university students' knowledge of and attitudes towards mental illness found a difference in knowledge and attitudes between universities situated in the urban areas than those in rural areas.

Five percent of the rural college students had adequate, 73% had moderate, and 22% had inadequate levels of knowledge, whereas 26%, 64%, and 10% of urban college students had adequate, moderate, and inadequate levels of knowledge respectively on mental illness.

2.4 Attitudes towards people with mental illness

People's beliefs and attitudes toward mental illness are fundamental in shaping their interaction with mentally ill people. Jaccard and Wood (1988), in their theory of attitudes, are of the view that attitudes are learned through the process of social learning. Therefore, it can be deduced that attitudes towards people with mental illness are formed as an individual accumulates knowledge about mental illnesses and is also exposed to the attitudes of other people. The more encounters that a person has with people with mental illness, the more favourable the attitudes (Jaccard & Wood, 1988). The opposite is also true according to Basson (2012); when people are constantly taught about violent behaviour and the danger of people with mental illness, negative attitudes will be formed. In Jones's (1970) view, "an attitude is a hypothetical or latent variable rather than an immediately observable variable" (p. 21). It is, in other words an abstraction from a large number of related acts or responses. Six variables that are related acts that form the abstraction attitude will be discussed next.

2.4.1 Variables that form the abstraction attitude

2.4.1.1 Separatism

According to Corrigan and Watson (2002), separatism is a discriminatory attitude. This factor reflects the perspective that a person suffering psychologically must be isolated from other patients and remain behind barred doors under surveillance. It encompasses both the concept of the patients' personal and social irrecoverability and the idea that these patients are dangerous (Santos, Soares, & Hirata, 2013).

Adewuya and Makanjuola (2005) in their study on social distance towards people with mental illness amongst Nigerian university students stated that, within the African context, social distances increase with the level of intimacy required in the relationship. Social distances are higher than those from the Western culture, with 65.1% of the respondents in their study categorised as having high social distance towards mentally ill people.

2.4.1.2 Stereotyping

Stereotyping is described as the selective perceptions that place people to obscure differences within groups (Aker et al., 2007). Corrigan and Watson further described stereotyping as the collective beliefs about different members of social groups, which lead to strong impressions, and expectations of individuals (as cited in Basson, 2012). This factor reflects the idea that the person suffering psychologically has distinct characteristics that clearly distinguish them from those considered normal (Santos et al., 2013).

2.4.1.3 Restrictiveness

This factor represents mental disorders as a type of hereditary defect that is completely distinct from other disorders or illnesses and suggests that the patients can transmit their disorder to their family and society. Therefore, these patients should be protected by restricting their personal and social rights even after hospitalisation (Santos et al., 2013).

2.4.1.4 Benevolence

This factor reflects the view that the person suffering psychologically, due to their misfortune, should be the subject of a kind and paternalistic protectionism based on care, personal attention, and material comfort (Santos et al., 2013).

2.4.1.5 Pessimistic prediction

Pessimistic prediction is a negative evaluative component. It is an aspect that measures the level of prejudice towards the mentally ill along with their mental illness (Aker et al., 2007).

2.4.1.6 Stigmatisation

Every illness has stigma attached to it, however, Lai, Hong, and Chee (2001) believed that the mentally ill are more stigmatised. Abdullah and Brown (2011) expressed the view that mental illness stigma is the biggest obstacle to future progress in the field of mental health.

This is because stigma discredits an individual, making that person different from others, and reducing the person's status from a "whole and usual person to a tainted discounted one" (Goffman, 1963, p. 11). Stigmatising attitudes towards mental illness have been prevalent recently (Todor, 2013).

A UK-based study on stigmatization of people with mental illnesses found that university students tend to view people with mental illness as violent, unpredictable, hard to talk to, different from others, incompetent in self-care and independent living, and responsible for their own disorders (Crisp, Gelder, Goddard, & Meltzer, 2005). This was also the case in a study conducted by Svensson, Nilsson, and Svantesson (2016) on 1101 Denmark students in eight different university programs providing training for work in the health care and social sectors.

Stigma towards mental illness appears to differ in intensity from one person to the next depending on the severity of their mental illness. It appears that people with more severe mental illness suffer the most; they are more stigmatised than people with mental illness that is less severe. This could be attributed to the fact that the symptoms of the severe mental illnesses are more easily identifiable than the less severe. The results of a study by Sorsdahl, Mall, Stein, and Joska (2010) on attitudes towards mental illness done in South Africa were consistent with this notion. They revealed that substance abuse was stigmatised significantly more than depression. Furthermore, a similar study Dev et al. (2017) in Delhi reported that discrimination or social isolation by the young population was relatively higher for individuals with psychosis than individuals with depression.

2.4.2 Contact and attitudes towards people with mental illness

Literature suggests that contact with people with mental illness is paramount in attitudes formation. Contact may be in a form of having a family member or someone in close proximity suffering from mental illness, or through theoretical or practical exposure. Studies around the world show that people are in increased contact with people with mental illness increasing from 58% in 2009 to 63% in 2012 (Kantar Public UK, 2013). A random global web users study by Seeman, Tang, Brown, and Ing (2016) conducted in 229 countries further indicated that up to 57 % of individuals in many countries are in daily contact with a person they think suffers from mental illness.

Literature points to a positive correlation between contact and positive attitudes. Lauber, Ajdacic-Gross, Fritschi, Stulz, and Rössler (2005) posited that contact with mental disorders, either in a theoretical way (e.g., by interest) or by practical activity (e.g., at work), increase positive attitudes towards individuals with mental illness. This was also the case in a study by Yadav et al. (2012) on medical students which showed a significant increase in positive attitudes after the students completed their psychiatry rotation. Furthermore, a study conducted by Svensson et al. (2016), revealed that students with practical experience in mental health service displayed less negative attitudes compared to students without practical experience. It is also believed that nurturing contact between people with mental illnesses and the general public reduces stigma (Crabb et al., 2012). A study done in New Zealand by Ng, Martin, and Romans (1995) on community's' attitudes towards the mentally ill reported positive attitudes after contact and better social distance practices. Another study by Ashe (2015) which looked at whether there were changes in attitudes toward persons with serious mental illness following a guest lecture by a seriously mentally ill person reported that there was a significant overall improvement in attitudes following personal contact with an individual with serious mental illness.

The opposite is expected with people with no previous contact with someone with mental illness. Todor (2013) argued that people with no previous contact with people with mental illness exhibit greater social distance to people with mental illness. Chung, Chen, and Liu (2001) in a study on university students' attitudes towards mental patients and psychiatric treatment similarly found that students without previous contact with mentally ill individuals keep greater distance from people with mental illnesses.

It can be concluded based on the literature that contact is an important component in shaping peoples' attitudes towards people with mental illness. It can be argued that contact should be a major component in programmes that seek to change attitudes and behaviours towards people with mental illness.

However, contact does not automatically produce positive attitudes illness (Shruti, Singh, & Kataria, 2016). Intergroup contact theory by Gordon Allport (1954) posited that contact between two groups can promote tolerance and acceptance, but only under certain conditions.

It is important to understand how and where the contact happens. Contact in a situation that induces anxiety is less likely to be effective in curing conflict. For contact to be effective, the duration of the contact is also important. Contact between groups should be long enough to allow the group members to adjust. When members have adjusted, anxiety is expected to dissipate.

2.4.3 Faculty differences in attitudes towards people with mental illness

It is believed that students studying in different fields exhibit different attitudes towards people with mental illness. Some studies show that attitudes of university students differ depending on their field of study. A study by Vijayalakshmi et al. (2013) on attitudes towards mental illness conducted in Indian universities found that nursing students held more positive attitudes towards all aspects of mental illness than business management students. They attributed this to the fieldwork experience and interest in working within the mental health field that nursing students have. In a similar study by Todor (2013) on opinions about mental illness of three groups doing different study programmes (Social Work, Theology, and Economics), students in economics displayed more tolerance compared to the other two groups. Social Work students registered significantly higher scores, reflecting a more positive attitude towards the mentally ill. The same study revealed that social work students were more literate in terms of mental illness compared to the other two groups.

It has been suggested fields of study that have contact with the mentally ill as part of the curricular are associated with positive attitudes. A study by Chung et al. (2001) conducted in Hong Kong universities found that medical and dental students were more accepting towards people labelled as mentally ill when compared with the social sciences and engineering undergraduates.

The study further revealed that students with a medical background, particularly those with history of previous contact with the mentally ill, had more positive attitudes towards mental patients; however, social reaction to the mentally ill among the social sciences and engineering students was not influenced by the contact experience.

2.4.4 Gender differences and attitudes towards people with mental illness

Gender is another important component that has been shown to play a role in attitude formation. Hypotheses about gender differences in public beliefs and attitudes about mental illness have been proposed over the years. However, the empirical evidence is scarce, particularly in research based on population studies (Holzinger, Floris, Schomerus, Carta, & Angermeyer, 2012). The literature is rather contradictory, with some studies finding that males are more knowledgeable than females (Dessoki & Hifnawy, 2009; Shruti et al., 2016), while other studies yielded results suggesting that females are more knowledgeable and have more positive attitudes compared to males (Savrun et al., 2007).

In terms of specific beliefs, knowledge and attitudes, the picture is even more variable. A study by Gibbons, Thorsteinsson, and Loi (2015) on beliefs and attitudes towards mental illness in Australia, for example, revealed that males were less knowledgeable in identifying mental illness, rated symptoms as less serious and believed that individuals had personal control over symptoms. However, other studies have shown women to be more likely to hold cultural beliefs towards mental illness. Bener and Ghuloum (2011) in a study on gender differences in the knowledge, attitude and practice towards mental health illness in a rapidly developing Arab society found that, among their study sample, more women attributed mental illness to possession by evil spirits compared to men. Also, more woman than men believed that mental illness could be treated by traditional healers.

Other studies have shown that many women are afraid and not willing to keep friendships with the mentally ill. This could possibly be as a result of the fact that women considered people with mental illness as dangerous; beliefs significantly lower in men (Todor, 2013). Lastly, Savrun et al. (2007) surveyed seven hundred final-year University students from the Management and Economics Faculty in Istanbul, Turkey. Females in that study held less stigmatising attitudes and optimistic attitudes about the treatability of mental illnesses compared to their male counterparts.

2.4.5 Culture and mental illness from an Afrocentric perspective

All cultures have disease theory systems which include attributional concepts to explain illness causality (Chipfakacha, 1994). Therefore, it is paramount that “people’s beliefs regarding mental illness should not only be known, but the purpose of their beliefs should be understood within the cultural context they exist” (Dessoki & Hifnawy, 2009, p. 3).

Mental illness cannot be understood without considering culture as culture influences what could be considered as normal or abnormal behaviour. Culture has been described as the embodiment of a worldview through learned and transmitted beliefs, values, and practices, including religious and spiritual traditions. It also encompasses a way of living informed by the historical, economic, ecological, and political forces on a group (American Psychological Association, 2017). Culture impacts on how people perceive and express their symptoms and behaviours. It further dictates which of the signs and symptoms meet the criteria for diagnosis. (American Psychiatric Association, 2017). Mabunda (2001) further stated that perception also plays a role in how the disease is treated.

This study is anchored on the Afrocentric perspective of mental illness. “Afrocentricity is a mode of thought and action in which the centrality of African interests, values, and perspectives predominate” (Asante, 2003, p. 2). It is the placing of African people in the core of any analysis of African phenomena.

The mainstay of African culture is that God created the universe and that all things in this universe, whether animate or inanimate, human or non-human, are interconnected through mutually influential relationships (Mkhize, 2004). According to the Afrocentric perspective, the universe is organised hierarchically and ecologically into three levels. The first level is the macro level where God is positioned as the creator of everything. God is believed to manifest in every aspect of daily life (Viljoen, 2002). Under the macro level is the meso level characterised by spirits or ancestors who are biological family members and/or respected members of the community (Mbiti, 1990).

Human beings are situated below spirits and ancestors, and they are themselves succeeded by animals and plants with inanimate objects stationed at the bottom of the hierarchy on the micro level (Mbiti, 1990; Viljoen, 2002).

In the African worldview, the cause of mental illness is more spiritual than physiological (Chipfakacha, 1994). This was evident in a study by Arboleda-Florez (2002) done in Nigeria where people attributed mental illness to divine wrath and the will of God as well witchcraft/spiritual possession.

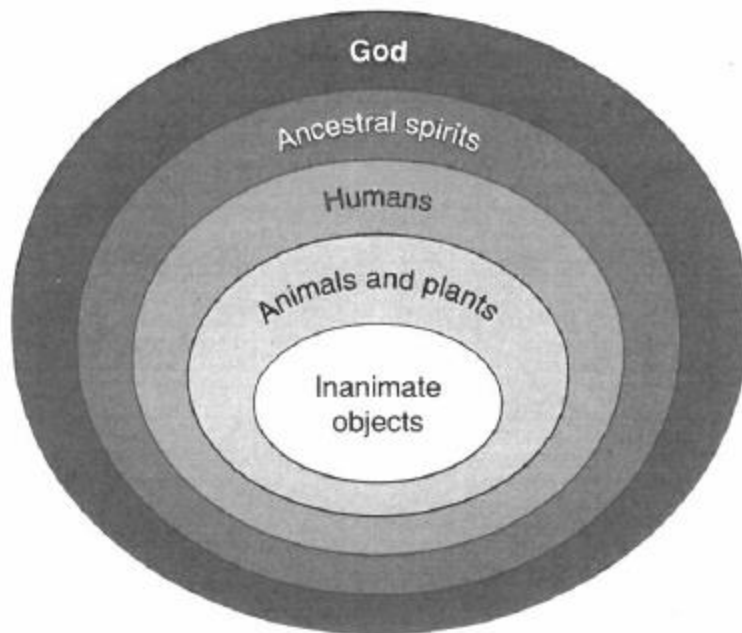


Figure 2:1. A hierarchical ordering of the world in African cosmology

Source: Semanya and Mokwena (2012, p. 75)

2.5 Theoretical framework: Labelling Theory

The study was anchored on the labelling theory which provides a distinctively sociological approach that focuses on the role of social labelling in how people perceive mental illnesses. Labelling evokes negative emotions that are stronger than necessary in the general public such as anger and fear and lead to stigmatising responses (Abdullah & Brown, 2011).

It is known that the environment is a crucial contributor to how one is shaped holistically. Matsueda (1992) argued that how an individual experiences the interaction with other people is important. Through this interaction, the self-concept is formed.

People learn how to define themselves (what they are, what they do) on the basis of how they perceive the attitudes of others toward them. People with mental illness may internalise how they are perceived by the general public and actually act how the public views them as a self-fulfilling prophecy. This results in self-stigma which leads to automatic thoughts and negative emotional reactions (Corrigan, 2007).

The term *self-fulfilling prophecy* is thus core in the labelling theory. A self-fulfilling prophecy comes about when a label causes a person to begin to act in accordance with the label, perpetuating the person's mental illness (Corrigan & Kleinlein, 2005). In Corrigan and Kleinlein's view, behaviour can stem from various causes and conditions; once individuals have been labelled, they often face new problems that stem from the reactions of self and others to negative stereotypes (stigma) that are attached to the label. In the words of Lemert (1967), dangerous behaviour in people with mental illness can become a means of defence, attack, or adaptation to the problems created by labelling. For example, if individuals with mental illness behave in a dangerous or violent way, that behaviour may be a reaction to difficulties experienced because of a negative label, or the behaviour could also be attributed to the condition itself. Therefore, the behaviour that is associated with mental illness might be imposed on the mentally ill by the labelling from the public. Labelling theory posits that the more disadvantaged a group is, the higher the chances of the group being labelled.

2.6 Summary

In this chapter, existing literature and theories relevant to the study were presented. Firstly, global trends of mental illness were presented followed by literature on knowledge of mental illness. Secondly, literature on attitudes towards mental illness was presented. Under the literature on attitudes, the following were presented: variables that form the abstraction attitude; the role of prior contact with people with mental illness; field of study; gender; and, culture on attitudes towards people with mental illness. Finally the theoretical framework (Labelling Theory) was presented.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter focuses on the methodology that guided the study. It outlines the research design, the procedures followed and the process of data collection and analysis. The ethical issues taken into consideration during the data collection process are also discussed.

3.2 Research design

The present study is rooted in the positivist paradigm. Positivism could be regarded as a “research strategy and approach that is based on the ontological principle and doctrine that truth and reality is free and independent of the viewer and observer” (Aliyu, Bello, Kasim, & Martin, 2014, p. 81). The positivist paradigm “asserts that real events can be observed empirically and explained with logical analysis also emphasises micro-level experimentation that eliminates the complexity of the external world (e.g., social, psychological)” (Kaboub, 2008, p. 343).

Methodologically, the study is quantitative and a descriptive survey research design is the chosen study design. A descriptive survey is a survey used for the purpose of simply describing the characteristics of a sample (Mertler & Charles, 2011). A quantitative approach is a method of understanding the world in order to predict and control it through identifying cause and effect relationships (Durrheim & Painter, 2006). A quantitative approach was employed wherein data was collected or coded into numerical forms which were statistically analysed to determine the significance of the findings (Durrheim & Painter, 2006).

3.3 Population and setting

The study was conducted at the University of Limpopo, situated in Turfloop, Sovenga, which is located about 27 km east of Polokwane in the Capricorn District, Limpopo Province, South Africa. The university has a population of approximately 21 152 students. Three thousand and sixty six of the students are postgraduate students and 18 086 are undergraduate students.

3.4 Sampling

For the purpose of this study, the sample was made up of Honours students from the Faculty of Humanities. Krejcie and Morgan's (1970) table was used by the researcher to determine the sample size. A systematic random sample of Honours students from the Faculty of Humanities was drawn from a population of 300 students registered at the University of Limpopo for the year 2018 (Private Communication: Humanities Administration Officer, February 25, 2018). On the Krejcie and Morgan (1970) table for determining sample size, the sample size of $N = 300$ is estimated at 165 (See Appendix 7).

Systematic random sampling includes a selection of sampling units in sequences separated on the lists by the interval of selection. The selection of the sample from the population list is made by randomly selecting a beginning and choosing every n th name (Bobbie, 2007). For this study, the sampling interval was calculated to be (1.8) which was rounded off to 2. This was attained by taking the total number of the population ($N = 300$) and dividing it with the number of participants in the sample ($n=169$).

3.5 Data collection instruments

The questionnaire used in this study was divided into three sections. Section A is about participants' biographical data, while Section B sought to investigate the students' knowledge of mental illness based on the Mental Health Knowledge Schedule (MAKS). Lastly, Section C sought to determine the students' attitudes towards people with mental illness based on the Attitude Scale for Mental Illness instrument (ASMI). The three sections will be discussed in details below.

3.5.1 Section A: Biographical data

The participants' biographical variables were determined using a questionnaire with items enquiring about age, gender, study course, school, religious affiliation and previous contact with someone who is mentally ill.

3.5.2 Section B: Mental Health Knowledge Schedule (MAKS)

Section B was based on the Mental Health Knowledge Schedule with the intention of exploring the students' knowledge of mental illness. The MAKS is a brief and feasible standardised scale that consists of six items that assess stigma-related mental health knowledge. The MAKS has an overall test-retest reliability of 0.71 and retest reliability ranging from 0.57 to 0.87. Its Item stability ranges from 0.54 to 0.69 and the overall internal consistency among items is 0.65 (Evans-Lacko, London, Little, Henderson, & Thornicroft, 2010).

Participants were asked to indicate the extent which they agree or disagree with statements. According to Evans-Lacko et al. (2010), the MAKS on its own cannot be considered a scale. However, its psychometric properties are strengthened when used in conjunction with other attitude and behaviour-related measures. Its internal reliability and test–retest reliability is moderate to substantial. The Cronbach's alpha for the participants for this scale was 0.475.

3.5.3 Section C: Attitude Scale for Mental Illness instrument (ASMI)

Section C was based on the Attitude Scale for Mental Illness instrument. The ASMI scale is a valid and reliable standardised self-report measure with a Cronbach's Alpha of 0.86.

This modified version of the questionnaire was originally used to measure opinions about mental illness in a Chinese community (Poreddi, Thimmaiah, & Math, 2015). The ASMI has 34 items that measures the general attitude to mental illness. Respondents were given the choice of five response categories to select based on their feelings from totally disagree to totally agree (Strongly disagree = 1, Disagree = 2, Uncertain = 3, Agree = 4, Strongly Agree = 5). The lower scores indicate positive attitudes toward persons with mental illness and higher scores indicate negative attitudes.

The questions in the questionnaire are grouped into six conceptual factors (see Appendix 1):

1) **Benevolence (Reverse coded)**

This factor includes eight items (37-42, 44, 45). It reflects the view that the person suffering psychologically, due to their misfortune should be the subject of a kind and paternalistic protectionism based on care, personal attention, and material comfort.

2) **Separatism**

This factor includes ten items, (20-29, 43). Separatism refers to the respondents' attitude of discrimination (Poreddi, Thimmaiah, & BadaMath, 2017).

3) **Stereotyping**

This factor includes four items (29-32). Stereotyping refers to the “degree of respondents' maintenance of social distance toward the mentally ill” (Poreddi et al., 2017, p. 88).

4) **Restrictiveness**

This factor is composed of four items (33-36), that hold an uncertain view on the rights of people with mental illness (Poreddi et al., 2017). Restrictiveness refers to the amount of restriction the mentally ill patients experience during out-patient treatment as well as in-patient treatment. In addition, it refers to how their family and society are protected from them after they are discharged (Basson, 2012).

5) **Pessimistic prediction**

This factor is composed of four items (46-49). Pessimistic prediction refers to the level of prejudice toward mental illness (Poreddi et al., 2017).

6) Stigmatisation

This factor includes four items (50-53). Stigmatisation refers to a feeling of disgrace or discredit, which sets a person apart from others (Poreddi et al., 2017).

According to Basson (2012), there are numerous reports about the acceptable values of alpha, ranging from 0.70 to 0.95. Thus, the ASMI scale is a reliable scale to use in this particular study. The Cronbach's Alpha for the scale in the study was 0.78.

3.6 Procedure

Possible participants were approached in their lecture halls after their lectures and introduced to the aims, procedures and ethics of the study to decide if they would like to participate. After they had verbally agreed to participate, the researcher randomly selected the first participant and from there every second participant was issued a confidential questionnaire. Attached to the questionnaire was the consent form which the participants completed first before completing the questionnaires. They could complete the questionnaire in about 20 minutes.

No identifying information (such as names, address, cell phone number, etc.,) was contained in the questionnaire and this, therefore, kept the individual responses confidential.

3.7 Data analysis

The purpose of data analysis is to reduce, organise and give meaning to the raw data. By so doing the aims and objectives are addressed. Data analysis in quantitative studies is conducted to reduce, organise and give meaning to the data, and to address the research aim(s) and specific research specific objectives (Burns & Grove, 2003). Data was analysed using the Statistical Package for the Social Sciences (SPSS) software package for Windows (Version 25). Demographic data was presented in the form of frequencies and percentages. Descriptive statistics were calculated for the variables of interest, including Means and Standard Deviations (SD). T-tests were calculated between the variables of interest to determine if there was any significant difference. Furthermore, Pearson's correlations, where applicable, were calculated for the variables of interest to determine whether any relationship existed between them.

The response of the benevolence domain was reverse coded before the analysis. For the purposes of this study, the confidence interval was set at 95% and the statistical significance was assumed at $P < 0.05$.

3.8 Ethical considerations

3.8.1 Permission to conduct the study

Permission to conduct the study was obtained from University of Limpopo's Turfloop Research Ethics Committee (TREC) prior the commencement of the study (see Appendix 5). The researcher then sought (see Appendix 4) and obtained gatekeeper permission to conduct the study. The Gatekeeper's permission was subsequently obtained (see Appendix 6) from the University of Limpopo registrar through the Dean of the Faculty of Humanities.

3.8.2 Informed consent

According to Christensen, Johnson, and Turner (2014), research participants should be informed about the reason, aims, and purpose of an investigation. In line with this ethical principle, the participants were informed about the purpose of the study and it was explicitly made clear to the participants that their participation was voluntary and that they could withdraw from participation at any point of the study. After being informed, the participants were issued consent forms which they signed prior to commencing with the study questionnaires (see Appendix 3).

3.8.3 Confidentiality and anonymity

Bless, Higson-Smith, and Kagee (2006) stated that sensitive and personal information provided by the participants should at all-time be protected. Confidentiality pertains to not disclosing any information gained from an interviewee, deliberately or accidentally, in ways that might identify an individual (Wiles, Crow, Heath, & Charles, 2008). The participants were informed about the issue of confidentiality and dissemination of information before the questionnaires were administered. Participant's names were not required; codes and pseudo-names were used to identify participants.

Furthermore, participants' data was locked in the departmental research unit. In a situation where the limit of confidentiality and privacy was expected, such as with supervisions, this was also discussed with participants.

3.8.4 No harm to participants

Participants were treated with respect and human dignity, their rights were protected and the study did not impose any physical harm on them. Should there been any harm suffered due to the study, the participants would have been referred to the University of Limpopo's Centre for Student Counselling and Development or, alternatively, to Mankweng hospital for psychological support.

3.9 Summary

In this chapter, the research methodology was discussed in detail, the research design was described and the sample and sampling techniques were described. Then, it was explained that the data was collected through a questionnaire and analysed using the Statistical Package for the Social Sciences (SPSS) software package for Windows. Finally, ethical considerations were discussed.

CHAPTER 4: RESULTS

4.1 Introduction

Chapter four presents the results of the study and highlights evidence that is in line with the aims and objectives of the study. This chapter also elaborates on how the researcher utilised the research instruments to derive the conclusions. Demographic information of the participants is displayed followed by the presentation of the quantitative data through the use of tables, and the hypotheses will also be tested.

4.2 Non-response to survey questionnaires

This research had a sample of 165 respondents. One hundred and forty three (143) respondents returned the completed questionnaires. The return rate was thus 86.7% which is an above average return rate. This is probably because the researcher handed out the questionnaires and waited for participants to return them (the attrition rate was thus 13.3%).

4.3 Approach to data analysis

Data was analysed using version 25 of the Statistical Package for Social Sciences (SPSS 25) software. Demographic data is presented in the form of frequencies, percentages and tables. T-tests were used to test for differences on knowledge and attitudes towards mental illness based on gender, school of affiliation, and previous contact.

4.4 Reliability testing

Table 4:1 is the presentation of the internal consistency of the questionnaire.

Table 4:1. Internal consistency of all variables

Items	Cronbach's Alpha	Average inter-item correlations	N of items
Mental health knowledge schedule	0.475	0.089	11
Attitude towards mental illness	0.780	0.074	34
Overall	0.653	0.045	45

Based on the table above, the combined Cronbach's Alpha of the scale is 0.653 which is lower than the baseline of 0.70.

4.5 Demographic characteristics

Section A is the demographic section that inquired about the participants' age, gender, school affiliation and contact. The results are presented below in a form of frequency tables.

Table 4:2 shows the frequency distribution of the participants' according to age.

Table 4:2. Participant's age

Age of participants	Frequency	Percent
20-25	109	76.2
26-30	24	16.8
31-35	8	5.6
36-40	2	1.4
Total	143	100

The above table indicates that, out of the 143 participants, 76.2% were between the ages 20 and 25 years. Participants aged 26 – 30 years constituted 16.8% of the participants while participants age 31-35 made 5.6% of the participants. The smallest group of participants (1.4%) were aged 36-40 years.

Table 4:3 is the frequency distribution of the participants' according to gender.

Table 4:3. Participant's gender

Participants gender	Frequency	Percent
Female	94	65.7
Male	49	34.3
Total	143	100.0

The above table indicates that females constituted the majority of the participants. 65.7% participants were females while 34.3% participants were male.

Table 4:4 is the frequency distribution of the participants' according to their school.

Table 4:4. Participant's school affiliation

Participant's school affiliation	Frequency	Percent
Social Sciences	49	34.3
Education	41	28.7
Language and Communication	53	37.1
Total	143	100.0

The above table indicates that the school of Language and Communication studies had the highest number of participants (N = 53) or 37.1% of the participants. The school of Social Sciences had 49 participants which was 34.3% of the sample. Forty one (28.7%) of the participants came from the school of Education.

Table 4:5 is the frequency distribution of the participants' according to contact with mental illness.

Table 4:5. Contact with someone with mental illness

Contact	Frequency	Percent
Yes	45	31.5
No	98	68.5
Total	143	100.0

The above table indicates that 68.5% of the participants had no prior contact with someone with mental illness. Only 31.5% reported having had previous contact with the mentally ill.

Table 4:6 is the frequency distribution of the participants' according their religious affiliation.

Table 4:6. Religious affiliation

	Frequency	Percent
Christianity	130	90.9
Indigenous African Religion	1	0.7
Combination of both 1 & 2	12	8.4
Total	143	100.0

The above table indicates that 90.9% of the participants were affiliated to the Christian religion, 0.7% were affiliated to the Indigenous African religion, and 8.4% reported believing in both the Christian and indigenous religions.

4.6 Mental Health Knowledge Schedule (MAKS)

Section B presents the frequency and descriptive tables of the participants' knowledge based on the MAKS. Firstly, descriptive tables of the participants' knowledge are presented. The statements on the MAKS are grouped in two categories: knowledge of disorders and knowledge of mental illness treatment. Descriptive tables of the two categories are then presented. Lastly, frequency tables of the students' knowledge based on the variables gender, school affiliation, and contact are presented.

4.6.1 Descriptive presentation of the participants' results (knowledge)

Table 4:7 is the presentation of the descriptive results of the participants' knowledge.

Table 4:7. Descriptive table of the participants' knowledge

	N	Mean	Std. Deviation
Treatment of mental illness	143	17.41	3.35
Identification of Disorders	143	21.43	4.46
Overall knowledge	143	38.55	5.94

According to the table above, the participants scored above average (Mean = 38.55). The breakdown of the attitudes indicates that the participants scored above average for both the knowledge of the treatment (Mean = 17.41) of mental illness and the identification (Mean = 21.43) of mental disorders.

Table 4:8 is the presentation of the descriptive results of the participants' knowledge.

Table 4:8. Descriptive table of the treatment of mental illness (treatment of mental illness)

Treatment of mental illness	N	Mean	Std. Deviation
Advice to get professional help.	142	3.61	1.196
Medication	143	3.84	1.14
Psychotherapy	143	3.88	0.98
Fully recover	143	3.02	1.01
Healthcare professional to get help.	142	3.11	1.21
Total	141	17.41	3.35

The table above suggests that the participants have above average knowledge on the treatment of mental illness (Mean = 17.41). The participants are knowledgeable in giving advice about professional help (Mean = 3.61), identifying medication (Mean = 3.84), psychotherapy (Mean = 3.88), and healthcare professionals as treatments for mental illness, and are knowledgeable about the fact that people with mental illnesses can fully recover (Mean = 3.02).

Table 4:9 is the presentation of the descriptive results of the participants' knowledge (identification of disorders).

Table 4:9. Descriptive table of the identification of disorders

	N	Mean	Std. Deviation
Depression	143	4.19	.403
Stress	140	2.49	.485
Schizophrenia	135	4.05	.427
Bipolar disorder (manic-depression)	140	4.46	.336
Drug addiction	141	2.82	.500
Grief	140	3.62	.476
Total	143	21.43	4.46

The table above indicate that the participants are knowledgeable in the identification of mental disorders (Mean = 21.43). A majority of the participants correctly identified depression (Mean = 4.19), schizophrenia (4.05), bipolar disorder (Mean = 4.46) and drug addiction (Mean = 2.82). However, a majority of the participants wrongly identified grief (Mean = 3.62) as the mental illness. The participants further scored average on identifying stress as a mental disorder suggesting that half of the participants believed that stress is a mental disorder while half correctly believed that it is not a mental disorder.

4.6.2 Frequency tables presentation of the participants' results (knowledge)

For the purpose of understanding the table below, it is important to note that items responses 1 and 2 on the MAKs were grouped into "inadequate knowledge" while responses 4 and 5 were grouped into "adequate knowledge". Response 3 remained "uncertain".

Table 4:10 is the presentation of the frequency distributions of the participants' knowledge.

Table 4:10. Frequency table of the students' knowledge

Knowledge	Frequency	Percent
Inadequate knowledge	46	32.2
Uncertain	26	18.2
Adequate knowledge	71	49.7
Total	143	100.0

In view of the above table, 49.7% of postgraduate students in the University of Limpopo have adequate knowledge of mental health and 32.2% of the students have somewhat below average knowledge of mental illness. 18.2% scored averagely on attitudes.

Table 4:11 is the presentation of the frequency distributions of the participants' knowledge based on gender.

Table 4:11. Frequency table of the students' knowledge (gender)

Gender	Mental health knowledge		
	Inadequate knowledge	Uncertain	Adequate knowledge
Female	34 (23.7%)	18 (12.5)	42 (29.3%)
Male	12 (8.3%)	8 (5.5%)	29 (20.2%)

In view of the above table, 29.3% of female students have adequate knowledge of mental illness. Another 23.7% female participants have inadequate knowledge of mental illness. A majority 20.2% of the male participants have adequate knowledge while 8.3% have inadequate knowledge. 12.5% (females) and 5.5% (males) have average knowledge about mental illness.

Table 4:12 is the presentation of the frequency distributions of the participants' knowledge based on the school.

Table 4:12. Frequency table of the students' knowledge (school)

School	Mental health knowledge		
	Inadequate knowledge	Uncertain	Adequate knowledge
Social sciences	20 (13.9%)	8 (5.5%)	21 (14.7%)
Education	12 (8.3%)	11 (7.6%)	18 (12.6%)
Language and communication studies	14 (9.7%)	7 (4.9%)	32 (22.4%)

The above table indicates that 14.7% of the participants in the school of Social Sciences had adequate knowledge while 13.9% had inadequate knowledge. 12.6% participants in the school of Education had adequate knowledge while 8.3% had inadequate knowledge. 22.4% of the participants in the school of Language and Communication studies had adequate knowledge while 9.7% have inadequate knowledge. 5.5% (Social Sciences), 7.6% (Education), and 4.9% (Language and communication studies) were rather in between adequate and inadequate knowledge.

Table 4:13 is the presentation of the frequency distributions of the participants' knowledge based on contact.

Table 4:13. Frequency table of the students' attitudes (contact)

Contact	Mental health knowledge		
	Inadequate knowledge	Uncertain	Adequate knowledge
Yes	14 (9.7%)	7 (4.9%)	24 (16.7%)
No	32 (22.4%)	19 (13.2%)	47 (32.8%)

Based on the above table, 45 participants had previous contact with someone who is mentally ill and 98 participants had no previous contact with someone who is mentally ill. Out of the 45 participants with previous contact, 14 participants had below average knowledge and 24 participants had above average knowledge. Out of the 98 participants, 32 participants had below average knowledge and 47 participants had above average knowledge.

4.7 Attitude Scale for Mental Illness (ASMI)

This section presents frequency and descriptive tables of the participants' attitudes based on the Attitude Scale for Mental Illness (ASMI). Firstly, descriptive tables of the participants' attitudes are presented. The statements on the ASMI scale are grouped in six sub-scales: stereotyping, benevolence, pessimistic prediction, restrictiveness, stigmatisation, and separatism.

Descriptive tables of the two categories are then presented. Lastly, frequency tables of the students' knowledge based on the variables gender, school affiliation, and contact are presented.

4.7.1 Descriptive presentation of the participants' results (attitudes)

Table 4:14 is the presentation of the descriptive results of the participants' attitudes.

Table 4:14. Descriptive table of the students' attitudes

Subscales	N	Mean	Std. Deviation
Stereotyping (S)	5	16.57	4.01
Restrictiveness (R)	4	8.26	3.02
Benevolence (B)	7	15.40	3.95
Stigmatisation (ST)	4	7.74	2.57
Pessimistic (PP)	4	12.44	3.31
Separatism (SP)	11	24.04	5.60
Attitudes	34	84.47	13.40

The above table indicates that the participants' mean on attitude is (Mean = 84.47). The table also present the breakdown of the different attitudes. The participants scored high on stereotyping attitudes (Mean = 16.57), followed by pessimistic attitudes (Mean = 7.74). The participants scored low on benevolence attitudes (Mean = 15.40), restrictive attitudes (Mean = 8.26), separatism (Mean = 24.04), and the lowest on stigmatising attitudes (Mean = 7.74).

4.7.2 Frequency tables presentation of the participants' results (attitudes)

For the purpose of understanding the tables below, it is important to note that responses 1 and 2 on the ASMI scale were grouped into "positive attitudes" while responses 4 and 5 were grouped into "negative attitudes". Response 3 remained "uncertain".

Table 4:15 is the presentation of the frequency distributions of the participants' attitudes.

Table 4:15. Frequency table of the students' attitudes

Attitudes	Frequency	Percent
Positive attitude	72	50.3
Uncertain	4	2.8
Negative attitude	67	46.9
Total	143	100.0

The above table indicates that 50.3% of the students had positive attitudes towards mental illness, while 46.8% of the participants had negative attitude towards mental illness. 2.8% of the participants were uncertain of their attitudes.

Table 4:16 is the presentation of the frequency distribution of the participants' attitudes based on gender.

Table 4:16. Frequency table of the students' attitudes (gender)

Gender	Attitude towards mental illness		
	Positive attitude	Uncertain	Negative attitude
Female	47 (32.86%)	2 (1.39%)	45 (31.46%)
Male	25 (17.48%)	2 (1.39%)	22 (15.38%)

The above table shows that 32.86% female and 17.84% male participants hold positive attitudes towards mental illness. On the other hand, 31.46% female and 15.38% male students hold negative attitudes towards mental illness. 1.39% female and 1.39% male participants hold neutral attitudes.

Table 4:17 is the presentation of the frequency distributions of the participants' attitudes based on school.

Table 4:17. Frequency table of the students' attitudes (school)

School	Attitude towards mental illness		
	Positive attitude	Uncertain	Negative attitude
Social sciences	28 (19.58%)	1 (0.69%)	20 (13.98%)
Education	22 (15.38%)	2 (1.39%)	17 (11.88%)
Language and communication studies	22 (15.38%)	1 (0.69%)	30 (20.97%)

According to the table above, 19.58% (Social Sciences), 15.38% (Education), and 15.38% (Language and Communication studies) hold a positive attitude towards people with mental illness. On the other hand, the above table shows that 19.98% (Social Sciences), 11.88% (Education), and 20.97% (Language and Communication studies) hold negative attitudes towards people with mental illness. 0.69% (Social Sciences), 1.39% (Education), and 0.69% (Language and Communication studies) hold neutral attitudes towards people with mental illness.

Table 4:18 is the presentation of the frequency distributions of the participants' attitudes (contact).

Table 4:18. Frequency table of the students' attitudes (contact)

	Attitudes towards mental illness		
	Positive attitudes	Uncertain	Negative attitudes
Yes	27 (18.88%)	3 (2.09%)	15 (10.48%)
No	45 (31.46%)	1 (0.69%)	52 (36.36%)

According to the above table, 18.88% participants with previous contact and 31.46% participants with no contact exhibit positive attitudes. 10.84% (contact) and 36.36% (no contact) display negative attitudes. Lastly, 2.09% (contact), 0.69% (no contact) display neutral attitudes towards people with mental illness.

4.8 Hypotheses

This section is the presentation of the participants' results based on the hypotheses. To determine which factors influenced students' knowledge and attitudes and towards the mentally ill, the researcher examined whether there were any significant associations (using Pearson's correlations) or differences (using Independent t-test).

4.8.1 Hypothesis 1

There are no gender differences in university students' knowledge of mental illness.

Table 4:19 is the presentation of the t-test results of the participants' attitudes (gender).

Table 4:19. T-test scores of students' knowledge (gender)

Knowledge	Mean		Sig. (2-tailed)	df	t
	Female	Male			
Knowledge (Disorders)	21.72 (4.34)	20.03 (4.52)	0.30	94.07	2.194
Knowledge (Treatment)	17.18 (4.34)	17.85 (4.52)	0.25	86.23	-1.095
Overall	38.90 (5.66)	37.88 (6.44)	0.32	87.17	0.941

Note. Standard Deviations appear in parentheses below means.

The t-test comparison result indicates no statistical significant difference on knowledge of mental illness between females (Mean = 38.90, SD = 5.66) and males (Mean = 37.88, SD = 7.25), $t(87.17) = 0.94$, $p = 0.32$. The p-values is > 0.05 , therefore, we accept H_0 .

4.8.2 Hypothesis 2

There are no differences in knowledge between university students studying different courses.

Table 4:20 is the presentation of the t-test results of the participants' knowledge (school).

Table 4:20. T-test scores of knowledge (school)

Knowledge	Mean		Sig. (2-tailed)	df	t
	Social sciences	Education			
Knowledge (Disorders)	22.06 (5.04)	20.60 (4.54)	0.15	87.47	0.425
Knowledge (Treatment)	16.79 (3.53)	17.51 (3.34)	0.33	86.66	-0.984
Overall Knowledge	38.86 (6.70)	38.12 (6.53)	0.60	85.96	0.524

Note. Standard Deviations appear in parentheses below means.

Based on the table above, the t-test comparison results indicate no statistical significant difference on knowledge of mental illness between students in the school of Social Sciences (Mean = 38.86, SD = 6.70) and the school of Education (Mean = 38.12, SD = 6.53), $t(85.96) = 0.52$, $p = 0.60$. The p-value is > 0.05 , therefore, we accept H_0 .

4.8.3 Hypothesis 3

There are no differences in knowledge between university students with prior contact with the mentally ill and students without prior contact with the mentally ill.

Table 4:21 is the presentation of the t-test results of the participants' knowledge (contact).

Table 4:21. T-test scores of knowledge (contact)

Knowledge	Mean		Sig (2-tailed)	df	t
	Yes	No			
Knowledge (Disorders)	21.55 (4.09)	20.94 (4.52)	0.452	95.74	0.745
Knowledge (Treatment)	17.46 (3.53)	17.38 (3.28)	0.89	80.22	0.130
Overall knowledge	39.02 (5.99)	38.38 (5.93)	0.52	84.79	0.639

Note. Standard Deviations appear in parentheses below means.

Based on the table above, the t-test comparison results indicate no statistical significant difference on knowledge of mental illness between students with previous contact (Mean = 39.02, SD = 5.99) and no previous contact (Mean = 38.38, SD = 5.93), $t(85.96) = 0.52$, $p = 0.60$. The p-value is > 0.05 , therefore, we accept H_0 .

4.8.4 Hypothesis 4

There are no gender differences in university students' attitudes towards mental illness.

Table 4:22 is the presentation of the t-test results of the participants' attitudes (gender).

Table 4:22. T-test scores of attitudes (gender)

Factor	Mean		Sig (2-tailed)	df	t
	Females	Males			
Stereotyping (S)	16.35 (3.66)	17.00 (4.61)	0.396	80.22	-0.85
Benevolence (B)	15.36 (3.78)	15.48 (4.28)	0.860	87.65	-0.17
Pessimistic prediction (P)	12.58 (3.36)	12.58 (3.24)	0.494	100.49	0.69
Restrictiveness (R)	8.30 (3.26)	8.18 (2.53)	0.816	120.23	0.23
Stigmatisation (ST)	7.58 (2.51)	8.04 (2.69)	0.329	91.47	-0.98
Separatism (SP)	23.89 (5.52)	24.32 (5.80)	0.668	93.26	-0.43
Attitudes	84.08 (13.41)	85.22 (13.48)	0.63	96.93	-0.48

Note. Standard Deviations appear in parentheses below means.

Based on the table above, the t-test comparison results indicate no statistical significant difference in attitudes of mental illness between female (Mean = 84.08, SD = 13.41) and male (Mean = 85.22, SD = 13.48), $t(96.93) = -0.48$, $p = 0.63$. The p-value is > 0.05 , therefore, we accept H_0 .

4.8.5 Hypothesis 5

There are no differences in attitude towards mental illness between university students studying different courses.

Table 4:23 is the presentation of the t-test results of the participants' attitudes based on school.

Table 4:23. T-test scores of attitudes (school)

Subscales	Mean		Sig (2-tailed)	df	t
	Social sciences	Education			
Stereotyping (S)	16.48 (4.24)	16.02 (3.80)	0.58	87.55	0.54
Benevolence (B)	15.16 (3.85)	15.46 (3.80)	0.71	85.60	-0.37
Pessimistic prediction (P)	12.57 (3.37)	12.09 (3.14)	0.49	86.97	0.68
Restrictiveness (R)	7.97 (2.96)	8.34 (3.20)	0.583	82.56	-0.55
Stigmatisation (ST)	7.75 (2.61)	7.26 (2.30)	0.356	87.76	0.92
Separatism (SP)	22.69 (4.65)	23.78 (5.90)	0.342	75.32	-0.95
Attitude	82.65 (13.57)	82.97 (12.01)	0.90	87.70	-0.11

Note. Standard Deviations appear in parentheses below means.

Based on the table above, the t-test comparison results indicate no statistical significant difference in attitudes of mental illness between students in the school of Social Sciences (Mean = 82.65, SD = 13.57) and school of Education (Mean = 82.97, SD = 12.01), $t(87.70) = -0.11$, $p = 0.90$. The p-value is > 0.05 , therefore, we accept H_0 .

4.8.6 Hypothesis 6

There are no differences in attitudes towards mental illness between university students with prior contact with the mentally ill and students without prior contact with the mentally ill.

Table 4:24 is the presentation of the t-test results of the participants' attitudes based on contact.

Table 4:24. T-test scores of attitudes (contact)

Subscale	Mean		Sig (2-tailed)	df	t
	Yes	No			
Stereotyping (S)	15.97 (3.18)	16.84 (4.32)	0.18	113.24	-1.34
Benevolence (B)	14.33 (2.82)	15.89 (4.29)	0.01	123.62	-2.58
Pessimistic prediction (P)	11.44 (3.47)	12.90 (3.15)	0.01	78.47	-2.40
Restrictiveness (R)	7.48 (2.70)	8.62 (3.11)	0.02	97.49	-2.21
Stigmatisation (ST)	7.06 (2.19)	8.05 (2.68)	0.02	103.06	-2.31
Separatism (SP)	23.17 (5.46)	24.43 (5.65)	0.20	88.27	-1.26
Attitudes	79.48 (12.37)	86.76 (13.29)	0.02	91.36	-3.18

Note. Standard Deviations appear in parentheses below means.

Based on the table above, the t-test comparison results indicate that there is a statistical significant difference in attitudes of mental illness between students with previous contact (Mean = 79.48, SD = 12.37) and no contact (Mean = 86.76, SD =13.29), $t(91.36) = -3.18, p = 0.02$. The p-value is < 0.05 , therefore, we reject H_0 and accept H_1 .

4.8.7 Hypothesis 7

There is no relationship between knowledge of mental illness and attitudes towards people with mental illnesses.

Table 4:25. Pearson correlation test of students' knowledge and attitudes

		Attitudes	Knowledge
Attitudes	Pearson Correlation	1	-.146
	Sig. (2-tailed)		0.08
	N	143	143
Knowledge	Pearson Correlation	-.146	1
	Sig. (2-tailed)	0.08	
	N	143	143

According to the table above, the results of the Pearson correlation indicated no significant relationship between the students' knowledge and attitude towards mental illness, $r = -0.14, n = 143, p = 0.08$.

4.9 Summary

This chapter presented the demographic results for the study. The results were presented in the form of frequency and descriptive tables. Independent t-test analysis was used to test for differences between the dependant variables (knowledge and attitudes) and independent variables (gender, school, and contact). Lastly, a Pearson correlation test was done to test for the relationship between knowledge and attitudes.

CHAPTER 5: DISCUSSION

5.1 Introduction

This chapter focuses on discussing the results presented in the previous chapter. The findings are discussed in relation to the available literature and the theories discussed in chapter two. The chapter also reviews the contribution of the study in terms of the aims set out in chapter one. Lastly, a summary of the discussion will be presented. The study intended to assess the levels of knowledge of mental illness and attitudes of University of Limpopo's postgraduate students towards people with mental illness. This was achieved by using a survey based analysis. The study also assessed the knowledge and attitudes in relation to the following independent variables: gender, course of study, and previous contact with someone with mental illness. The association between knowledge about mental illnesses and attitudes towards people with mental illness was also studied.

5.2 Knowledge of mental illness

The results of this study show that the students who participated in the study were generally knowledgeable about mental illness. Further analysis reveals that most students were able to correctly identify four of the six mental disorders: depression, schizophrenia, bipolar disorder, and alcohol abuse (see Table 4:8). The results are in line with a study by Kantar Public UK (2013) where most respondents agreed that schizophrenia, bipolar disorder, and depression were types of mental illnesses. The same study revealed that less than half of the students identified stress as mental disorder. This was not the case in this study; more than half of the students identified stress as a mental disorder.

Furthermore, the majority of the students incorrectly identified grief as a mental illness while only a few students knew that grief was not a mental illness. The low scores on grief should be understood with the following consideration: grief is the natural reaction to loss that is not classified as a mental illness.

However, sometimes normal grief can gain a foothold and become a debilitating condition called complicated grief. For one to understand the difference between grief and complicated grief, a more advanced knowledge of psychology is needed.

The students were also adequately knowledgeable about the available ways of treating mental illness. They believed in a multi-disciplinary approach to treating mental illness where a combination of medication, psychotherapy and visiting a general practitioner can be effective (see Table 4:7). These results of the study are consistent with a study by Kantar Public UK (2013) where the respondents agreed that psychotherapy and medication can be effective treatments for people with mental illnesses. On the contrary, a study by Marcus, Westra, and Mobilizing Minds Research Group (2012) conducted in Canada revealed that young adults were less likely to regard medication as helpful in the treatment of mental illnesses and were marginally less likely to believe that psychotherapy could be helpful. The results also partially contradict a study by Youssef et al. (2014), in which the participants, like in this study, agreed that particular diseases were mental illnesses but they showed overall knowledge scores that were low, while the knowledge scores are higher in this study.

5.3 Attitudes towards mental illness

People's beliefs and attitudes toward mental illness are fundamental in shaping the interaction with mentally ill people (Tork & Abdel-Fattah, 2015). The results of the study show that the students' attitudes toward individuals with a mental illness were generally positive. Most students believed that people with mental illness can be transparent about their illnesses while leading a successful occupational life without feeling shame attached to their conditions. In addition, the students believed that there are other aetiological factors besides external forces (e.g., punishment).

The results support a previous study by Wahl et al. (2012) conducted in the United States. However, the students believing in other aetiological factors besides external forces is contrary to the African worldview, in which, according to Loveday (2001), mental illness is caused by witchcraft, failure to connect spiritually with the ancestors, God, or a punishment from the Gods.

The students believed that people with mental illness can enjoy a good family life and have children. In light of the above stated contradiction, it should be noted that according to Kometsi (2016), a number of cultural practices are shared amongst sub-Saharan African peoples. However, it does not necessarily imply that African culture or traditional practices are homogeneous. Furthermore, not all black South Africans believe in African indigenous practices due to colonisation, Christianity and apartheid (Matoane, 2012). Pretorius (1995) also postulated that three broad cultures can now be differentiated in South Africa: a) Westernised people; b) traditional people; and c) 'inbetweeners'. This is seen in the results of this study, where 90.9% of the students reported to be of the Christian religion, 0.7% believed in indigenous African religion, and 8.4% reported to believe in a combination of both. This could possibly be the reason the students were not entirely for the notion that mental illness is a form of punishment.

The students also reported having sympathetic attitudes towards people with mental illnesses. The students were of the opinion that people with mental illness deserve care and support from their families and communities in order to be rehabilitated. Once fully rehabilitated, they can hold jobs and be reintegrated back into the community with their dignity intact. The students further believed that people with mental illnesses should not be separated from the community. According to Angermeyer, Matschinger, and Corrigan (2004), weaker perceptions of dangerousness correspond closely with less fear. The results support this, as most of the students perceived the mentally ill as neither violent nor dangerous and no fear was attached to people with mental illnesses.

However, some students displayed negative attitudes. A majority of the students believed in maintaining some degree of social distance from the mentally ill and were prejudiced towards people with mental illness. This could be because they thought that people with mental illness were intellectually compromised, and displayed strange behaviours that set them apart from people without mental illness.

In addition, the students believed that after receiving treatment, people with mental illnesses will find it difficult to be reintegrated back to the community and create meaningful relationships with other people. Lastly, the students believed that people with mental illness should not enjoy the same privileges like receiving the same pay for the same job like everyone in the community.

Knowledge and attitudes in developed countries have been improving but the same cannot be said about lower- and middle-income countries (Eaton et al., 2011). Based on the above statement, South Africa as developing country is expected to display lack of knowledge about mental illness and the attitudes are expected to be negative. The results of this study defied this notion entirely. The students were knowledgeable about mental illness and the attitudes towards people with mental illnesses were slightly positive. The socio-economic status of a country cannot be the only factor that impacts on knowledge of mental illness and attitudes towards mental illness. The researcher expands the discussion to further dissect the results of the study in an attempt for a coherent integration of the results with the available literature.

The researcher believes that humans are born “tabula rasa”. From a behaviourism perspective, what this mean is that humans are born with their minds a blank slate and behaviour is learned from the environment they live in. According to Njenga (2007), historical context, cultural influence and level of education determine the concept of mental disorder. According to the researcher, the South African context, culture, media, and the state of the mental health care services contributed immensely to the students’ knowledge of mental illnesses and attitudes towards people with mental illness.

5.3.1 Cultural influence

Culture is one of the greatest contributors in populating the “clean slate”. Dessoki and Hifnawy (2009) emphasise the importance of understanding how Africans conceptualise mental illness. In many parts of Africa, South Africa included, mental illness is understood to be present when an individual shows behavioural signs (aggression, talking incoherently, shouting loudly, and confusion among others), symptoms that are perceived to deviate from social norms (Mufumadi, 2001; Mzimkulu & Simbayi, 2006).

This could be the explanation for the majority of the students being able to correctly identify depression, bipolar disorder, and schizophrenia as mental illnesses because of their behavioural signs. Jorm (2000) as well as Corrigan and Watson (2002), stated that for people to improve their attitude towards mental illness, the ability to identify a condition as a form of mental illness is paramount.

To some extent the statement is true. However, if the person can only identify mental illnesses that have a behavioural component (e.g. aggression, shouting loudly), it is highly likely that they display negative attitudes like maintaining some degree of social distance, prejudice, and believing that people with mental illnesses cannot coexist with other people in the community, which was the case for some students in this study.

As the results show, the students like to maintain some degree of social distance from mental illness. Attitudes like this could also be perpetuated by the nature of the mental health care system in South Africa. In 1997, mental health was included in the White Paper for the Transformation of the Health System in South Africa (Lund, Petersen, Kleintjes, & Bhana, 2012). Subsequently the Mental Health Care Act, No. 17 of 2002 was promulgated aligning the provision of mental health services in South Africa with the country's constitution (Mkhize & Kometsi, 2008). The rationale for this approach was to make services accessible and affordable. This meant that mental health services were to be integrated into primary healthcare. Even though there are policies like the above listed which vouch for de-institutionalisation approach, the implementation is non-existent. This was evident in the recent Life Esidimeni tragic incident where a total of 1,300 mental health patients were transferred from a mental health facility, the Life Esidimeni Healthcare Centre, to non-profit organisations which were not equipped to manage and care for them. The move resulted in about 132 deaths. The approach of keeping people with mental illnesses in high security institutions is not doing any favours to peoples' attitudes towards mental illness; rather it further perpetuates attitudes like social distance and people believing that people with mental illness cannot coexist with other people.

5.3.2 Media portrayal

The Life Esidimeni incident raises the issue of how media portrays people with mental illnesses. The understanding of mental illnesses has been on the rise in the past decades. The public have been exposed to vast information on symptoms, causes, and treatments of mental illnesses (Schomerus et al., 2012). A majority of information comes from the media as an influential tool that informs society's views of mental illness. According to Ma (2017), media is the most common source of information about mental illnesses.

It is also said that mass media is also one of the public's primary sources of information about disorders such as bipolar, schizophrenia and depression which could explain why a high number of students in the study correctly identified these conditions as mental illness.

However, "people with mental illness are often depicted as violent and socially undesirable by the media" (Smith, 2015, p. 1). Language used in the media is another contributing factor. A study by Mfoafo-M'Carthy, Sottie, and Gyan (2016) in Ghana showed that the media used negative descriptor words such as 'crazy', 'lunatic' and 'mentally deranged' or 'mentally challenged'. The labelling by the media may, according to the theory of labelling, evoke negative emotions such as anger and fear that are stronger than necessary in the general public and lead to stigmatising responses as seen in this study. The danger of the media portraying a distorted image of people with mental illnesses is that the public may learn and internalise what the media portrays and create schema of interacting with people with mental illnesses.

The other side to the "tabula rasa" coin is the belief that, at birth, all humans are born with the ability to become literally anything or anyone. Humans are not mere passive consumers of what the environment feeds them, in this case culture, media, and the current affairs of the mental health care system. This possibly explains why, in this study, even when people with mental illnesses are portrayed in a negative light by the environment, some students' positive attitudes prevailed. Considering that the current study was on postgraduate students, on that level, students should critically evaluate information and not take information at face value. Maybe if the study was on undergraduates or the uneducated population, the attitudes would have been negative. Another reason could be that, through their studies, the students might have been exposed to accurate information about mental illness.

It may then be concluded that education counterbalanced the information given to the students by culture, media, and the state of the mental health care system to create slightly positive attitudes.

5.4 Knowledge, attitudes and gender

The results of the study suggest that there is no significant gender difference in university students' knowledge of mental illness (see Table 4:18) and attitudes towards people with mental illnesses (see Table 4:21). These results are consistent with a study done on university students in Nigeria by Guruje et al. (2005).

The study reported no differences in knowledge based on gender. However, as mentioned earlier, some studies show contradicting results. Some, like a study by Youssef et al. (2012), show that females have greater knowledge than males. Gibbons et al. (2015) also reported that males were less likely to correctly identify the type of mental illness. On the other hand, other studies have showed that males exhibit greater knowledge than females (Bener & Ghuloum, 2011; Shruti et al., 2016). In terms of attitude towards mental illness, the results of the current study contradict a study by Shruti et al. (2016) that found male respondents expressed more positive attitudes compared to females.

5.5 Knowledge, attitudes and study course

The study also hypothesised that there was a difference in knowledge of mental illnesses and attitudes towards people with mental illnesses based on course they are studying. However, the results of the study show no significant difference in knowledge and attitudes between students in the School of Education and students in the School of Social Sciences (see Table 4:19 and 4:22). The results are consistent with a study by Yamamoto and Dizney (1967), which revealed no difference in students' attitudes towards mental illness based on the course they are studying. The opinion on whether educational background affects attitude towards people with mental illness has been vague, with some studies showing a relationship and some showing no relationship. Contrary to the results of this study, a study by Shruti et al. (2016) found that education strengthens positive attitudes and reduces stigma.

5.6 Knowledge, attitudes and contact

The study further hypothesised no difference in knowledge and attitudes towards mental illness between people with previous contact with people with mental illness and no contact. The results of the study tend to confirm the first part of this hypothesis, showing no difference in knowledge between the two groups of students. However, in terms of attitudes, the study revealed significant differences between the two groups of students.

The results of this study lend support to studies carried out by some researchers which have showed that attitudes may change through social contact by (see Corrigan & Watson, 2002; Frías et al., 2018). The number of students with previous contact in this study was lower than numbers presented in certain studies such as Seeman et al. (2016) and Shruti et al. (2016), where 57% and 65% of participants were in daily contact with a person with mental illness. It should be noted that both these studies were done in developed countries. Another study, conducted in an African country, showed that, out of the 680 students surveyed, only 227 students reported previous contact (Blaise, 2015). In this study 31.5% of the participating students reported having previously been in contact with someone with mental illness (see Table 4:5). The results further reveal that the students' knowledge was adequate regardless of whether there were previously in contact with the mentally ill or not. From the 90 students with no previous contact in the study, 52.2% reported having adequate knowledge. In addition, 53.3% out of the 45 students with previous contact reported having adequate knowledge (see Table 4:11).

From the researcher's perspective, the low contact could be as a result of underutilisation of mental health services. However, it is also said that "poor infrastructure hinders the provision of mental health services at the primary level of care and this is particularly so in the rural areas" (Mkhize & Kometsi, 2008, p. 108). In South Africa, most mental health services are concentrated in urban settings, and virtually all specialised mental healthcare facilities and personnel are located in the major metropolitan areas. As a result, in excess of 20 million people in the country's non-urban areas, have virtually no reasonable access to mental healthcare (Pillay et al., 2009).

University of Limpopo is situated in a rural area, and the majority of its students are from rural areas where access to mental health care services is minimal. This means that the contact with the mentally ill might be higher than reported but the mental illness might not be diagnosed.

As previous stated in the discussion, the students identified disorders that had a behavioural manifestation like it is portrayed by the media and defined by the culture. There is a possibility that more students were in contact with people with mental illnesses presenting with disorders that were not known to the students and could not be identified. The low contact could then be attributed to the limited knowledge in terms of identifying mental disorders. The researcher suggests that the contact might not be as low as reported. More students having been in contact with people with mental illness might positively influence students' attitude toward mental illness (Abdullah & Brown, 2011). The results of this study align with Abdulla and Brown's (2011) perspective.

Further analysis of the results revealed that students with previous contact scored high on the following factors: benevolence, pessimistic prediction, restrictiveness, and stigmatisation. Students with previous contact held a less paternalistic and sympathetic view, maintained a high social distance towards the mentally ill, and believed that people with mental illness are a threat to the community. The results of the study contradict the work of Chung et al. (2001), who stated that greater social distance is associated with no previous contact with the mentally ill, and confirms the work of Poreddi, Thimmaiah, and Math (2015), who found a strong relation between contact with mental illness and stigmatisation toward mental illness.

It is believed that contact may lead to improved attitudes towards people with mental illness (Frías et al., 2018). For attitudes to be improved, however, contact has to happen in an environment that is conducive. Intergroup contact theory posits that contact between two groups can promote tolerance and acceptance, but only under certain conditions (American Psychological Association, 2001). As stated previously, institutionalisation of people with mental illnesses, particularly the more severe ones, does not foster good contact between the two groups. The contact is in high security secluded institutions further perpetuating attitudes that people with mental illnesses are violent and dangerous and should be feared.

The portrayal of people with mental illnesses as dangerous may lead to people manoeuvring for social distance and limiting the chances of contact. The students believing that people with mental illnesses are a threat to the community perpetuates the manoeuvring for social distance.

Knowledge about mental illnesses plays a role in developing and maintaining attitudes, but knowledge is not the sole predictor of attitudes. Some factors, as seen in the study, mitigate while others aggravate attitudes towards people with mental illnesses. However the study found no relationship between the two. This means that, in this study, an increase in knowledge did not necessarily translate to positive attitudes or the opposite.

5.7 Association between knowledge and attitudes

It was hypothesised that there was no relationship between knowledge of mental illnesses and attitudes towards people with mental illness. The results of this study confirm this, showing no relationship between knowledge and attitudes (see Table 4:24). This is contrary to the notion that better knowledge is often associated with positive attitudes towards people with mental illness (Momi & Saikia, 2016).

5.8 Summary

This chapter presented a discussion of the results presented in the previous chapter. The results were discussed in light of the existing literature and theories presented in chapter two. Firstly, a discussion of the participants' knowledge of mental illness was presented. Secondly, a discussion of the participants' attitudes towards people with mental illness was presented. This was followed by a discussion of the impact of the variables gender, field of study, prior contact with people with mental illness has on the participants' knowledge of mental illness and attitudes towards people with mental illness. Lastly the results on the relationship between the participants' knowledge of mental illness and attitudes towards people with mental illness were discussed.

CHAPTER 6: SUMMARY AND CONCLUSION

6.1 Summary of the findings

The study sought to explore the knowledge and attitudes of University of Limpopo postgraduate students towards mental illness. Generally, the results show that the University of Limpopo postgraduate students are knowledgeable when it comes to mental illness. The students were able to identify mental disorders. Their knowledge is not only limited to that, but they were also aware of the various treatments available for mental illness. The students further believed in a multi-disciplinary approach to the treatment of mental illness, with students who believed that medication is a treatment for mental illness also believing that psychotherapy is a feasible treatment. Moreover, the results showed that gender, course of study, and previous contact plays no role in the students' knowledge of mental illness.

The students displayed slightly positive attitudes but the differences between them were minimal. However, the study shows that knowing someone with a mental illness yielded more comprehending and favourable attitudes. Conversely, the present study reported no difference in attitudes among male and female studies affiliated in the different schools suggesting that educational background does not have an impact on attitudes towards people with mental illness.

Literature has suggested a relationship between mental health knowledge and attitudes towards mental illness. This was, however, not the case in this study, as there was no relationship between knowledge and attitudes. Lastly, the study contributes vastly to understanding of the knowledge and attitudes of university students regarding mental illness. The results of the study will inform mental health programmes that seek to educate university students about mental illness and also shed light on factors that influence students' help-seeking behaviours.

6.2 Limitations of the study

Though this study revealed significant findings, there were several limitations:

- The current study is only applicable to the University of Limpopo, unless a confirmatory study with the same methodology is conducted in a different university.
- The sample used was limited to honours students in the Faculty of Humanities in the University of Limpopo. Consequently, the findings of this study cannot be generalised to the larger university population.
- The study lacked a qualitative component, which may have provided more data regarding students' knowledge of mental illness and attitude towards mental illness.
- Participants may not have been entirely honest when answering the questionnaires seeking to give answers that were socially desirable.
- Considering the culturally and socially sensitive nature of attitudes, caution is required when comparing results across different contexts.

6.3 Recommendations

Based on the above findings, the following recommendations are made:

- More studies should be done on the knowledge of and attitudes towards mental illness. These studies can utilise a mixed method approach to gather rich data.
- A comparative study between undergraduates and post graduates could be done to compare their knowledge and attitudes towards mental illness.
- A study that investigates knowledge and attitudes towards mental illness can be done sampling from a population of different universities.
- Since studies show that contact has an effect on attitudes towards mental illness, awareness campaigns should structure their programmes to encourage contact with the mentally ill. However, this should be done cautiously as not all contact yields positive attitudes.

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APPENDICES

Appendix 1: Questionnaire

Knowledge and Attitudes towards mental illness questionnaire

Participant No: _____

Instructions

Only commence with answering the questions after having read the informed consent and information sheet and the participant understood and consented to be interviewed.

Section A: Demographic data

Place a mark (or fill) in the blank space next to your answer.

1. Age (in years):

20-25	1
26-30	2
31-35	3
36-40	4
Other, specify	

2. Gender:

Female	1
Male	2

3. Course:

4. School:

Social Sciences	1
Education	2
Language and communication studies	3

5. I have a friend or relative who has a mental illness:

Yes	1
No	2

6. Religion

Christianity	1
Indigenous African Religion	2
Combination of both 1 & 2	3
Other, specify	4

Section B: Mental health knowledge

This section focuses on the knowledge of the students on mental illness. The questions are adopted from the Mental Health Knowledge Schedule (MAKS).

Instructions: For each of statements 8– 12 below respond by ticking one box only.	
(1) Strongly Disagree (2) Disagree (3) Uncertain (4) Agree (5) Strongly Agree	
8. If a friend had a mental health problem, I know what advice to give them to get professional help.	1 2 3 4 5
9. Medication can be an effective treatment for people with mental health problems.	1 2 3 4 5
10. Psychotherapy (for example, therapy or counselling) can be an effective treatment for people with mental health problems.	1 2 3 4 5
11. People with severe mental health problems can fully recover.	1 2 3 4 5
12. Most people with mental health problems go to a healthcare professional to get help.	1 2 3 4 5
Instructions: Say whether you think each condition is a type of mental illness by ticking one box only.	
13. Depression	1 2 3 4 5
15. Stress	1 2 3 4 5
16. Schizophrenia	1 2 3 4 5
17. Bipolar disorder (manic-depression)	1 2 3 4 5

18. Drug addiction	1	2	3	4	5
19. Grief	1	2	3	4	5

Section C: Attitude towards mental illness

This section focuses on the attitudes of the students towards mental illness. The questions are adopted from the Attitude Scale for Mental illness (ASMI).

Please indicate how much you agree or disagree with each of the following statements. The position of the number you choose to encircle will depend on how strongly you feel about the statement.

(1) Strongly Disagree	(2) Disagree	(3) Uncertain	(4) Agree	(5) Strongly Agree	
20. People with mental illness have unpredictable behaviour.	1	2	3	4	5
21. If people become mentally ill once, they will easily become ill again.	1	2	3	4	5
22. If a mental health facility is set up in my street or community, I will move out of the community.	1	2	3	4	5
23. Even after a person with mental illness is treated, I would still be afraid to be around them.	1	2	3	4	5
24. Mental patients and other patients should not be treated in the same hospital.	1	2	3	4	5
25. When a spouse is mentally ill, the law should allow for the other spouse to file for divorce.	1	2	3	4	5
26. People with mental illness tend to be violent.	1	2	3	4	5
27. People with mental illness are dangerous.	1	2	3	4	5
28. People with mental illness should be feared.	1	2	3	4	5
29. It is easy to identify those who have a mental illness.	1	2	3	4	5
30. You can easily tell who has a mental illness by the characteristics of their behaviour.	1	2	3	4	5
31. People with mental illness have a lower I.Q.	1	2	3	4	5
32. All people with mental illness have some strange behaviour.	1	2	3	4	5
33. It is not appropriate for a person with mental illness to get married.	1	2	3	4	5

34. Those who have a mental illness cannot fully recover.	1	2	3	4	5
35. Those who are mentally ill should not have children.	1	2	3	4	5
36. There is no future for people with mental illness.	1	2	3	4	5
37. People with mental illness can hold a job.	1	2	3	4	5
38. The care and support of family and friends can help people with mental illness to get rehabilitated.	1	2	3	4	5
39. Corporations and the community (including the government) should offer jobs to people with mental illness.	1	2	3	4	5
40. After a person is treated for mental illness they can return to their former job position.	1	2	3	4	5
41. The best way to help those with a mental illness to recover is to let them stay in the community and live a normal life	1	2	3	4	5
42. After people with mental illness are treated and rehabilitated, we still should not make friends with them.	1	2	3	4	5
43. After people with mental illness are treated, they are still more dangerous than normal people.	1	2	3	4	5
44. It is possible for everyone to have a mental illness.	1	2	3	4	5
45. We should not laugh at the mentally ill even though they act strangely.	1	2	3	4	5
46. It is harder for those who have a mental illness to receive the same pay for the same job.	1	2	3	4	5
47. After treatment it will be difficult for the mentally ill to return to the community.	1	2	3	4	5
48. People are prejudiced towards those with mental illness.	1	2	3	4	5
49. It is hard to have good friends if you have a mental illness.	1	2	3	4	5
50. It is seldom for people who are successful at work to have a mental illness.	1	2	3	4	5
51. It is shameful to have a mental illness.	1	2	3	4	5
52. Mental illness is a punishment for doing some bad things.	1	2	3	4	5
53. I suggest that those who have a mental illness do not tell anyone about their illness.	1	2	3	4	5

Thank you for your time!

Appendix 2: Consent letter to participants

Department of Psychology
University of Limpopo
Private X1106
Sovenga
0727
Date: _____

Dear participant

Thank you for agreeing to take part in this study which focuses on knowledge and attitude of postgraduate students at the University of Limpopo. The purpose of the study is to explore the knowledge and attitude of University of Limpopo postgraduate students towards mental illness.

Kindly answer all the questions as honestly as you can. Your responses are strictly confidential. You are free to answer any question. Participation is voluntary and you are therefore free to withdraw from this study at any time. Thank you for your participation.

Kind regards

J Mokwebo (Master's Student)

Date

Appendix 3: Consent form

CONSENT FORM

PROJECT TITLE: Knowledge and Attitudes of University of Limpopo's postgraduate students towards mental illness

PROJECT LEADER: J Mokwebo

I, hereby voluntarily consent to participate in the following project: **Knowledge and Attitudes of University of Limpopo's postgraduate students towards mental illness**

I realise that:

1. The study deals with **Knowledge and Attitudes towards mental illness**
2. The procedure or treatment envisaged may hold some risk for me that cannot be foreseen at this stage;
3. The Ethics Committee has approved that individuals may be approached to participate in the study;
4. The experimental protocol, i.e. the extent, aims and methods of the research, has been explained to me;
5. The protocol sets out the risks that can be reasonably expected as well as possible discomfort for persons participating in the research, an explanation of the anticipated advantages for myself or others that are reasonably expected from the research and alternative procedures that may be to my advantage;
6. I will be informed of any new information that may become available during the research that may influence my willingness to continue my participation;

7. Access to the records that pertain to my participation in the study will be restricted to persons directly involved in the research;
8. Any questions that I may have regarding the research, or related matters, will be answered by the researchers. You may contact me (Jackson Mokwebo) at jmokwebo@gmail.com if you need more information or feel uncomfortable with the research process at any time;
9. If I have any questions about, or problems regarding the study, or experience any undesirable effects, I may contact a member of the research team;
10. Participation in this research is voluntary and I can withdraw my participation at any stage;
11. If any medical problem is identified at any stage during the research, or when I am vetted for participation, such condition will be discussed with me in confidence by a qualified person and/or I will be referred to my doctor;
12. I indemnify the University of Limpopo and all persons involved with the above project from any liability that may arise from my participation in the above project or that may be related to it, for whatever reasons, including negligence on the part of the mentioned persons.

SIGNATURE OF RESEARCHED PERSON

.....

SIGNATURE OF WITNESS

.....

SIGNATURE OF PERSON THAT INFORMED
THE RESEARCHED PERSON

.....

Signed at _____ this ____ day of _____ 20__

Appendix 4: Letter of permission to the dean of the Faculty of Humanities

Department of Psychology

University of Limpopo

Private X1106

Sovenga

0727

Date: 14/02/2018

RE: **request for permission to conduct research**

Dear sir/madam

I am writing to request permission to conduct a research on postgraduate honours students in the faculty of humanities. I am currently enrolled in the masters in Clinical psychology programme at University of Limpopo. The study is entitled: **Knowledge and Attitudes of University of Limpopo's Postgraduate Students towards Mental Illness.**

I hope that the school administration will allow me to recruit 200 honours students from the faculty to anonymously complete a 5-page questionnaire. Interested students will be informed that participation is voluntary. Students, who volunteer to participate, will be given a consent form to be signed prior to the completion of the questionnaire.


I have provided you with a copy of my research proposal which includes copies of the questionnaire and consent and assent forms to be used in the research process, as well as a copy of the approval letter which I received from the University of Limpopo Research Ethics Committee.

Your approval to conduct this study will be greatly appreciated. You may contact me on my email address: jmokwebo@gmail.com, alternatively on 0817458141 for any questions or concerns that you may have.

Sincerely,

J Mokwebo (masters in clinical psychology student)

Appendix 5: Ethical clearance


University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 4029, Fax: (015) 268 2306, Email: Abdul.Maluleke@ul.ac.za

**TURFLOOP RESEARCH ETHICS
COMMITTEE CLEARANCE CERTIFICATE**

MEETING: 02 November 2017

PROJECT NUMBER: TREC/392/2017: PG

PROJECT:

Title: Knowledge and attitudes of University of Limpopo's postgraduate students towards mental illness

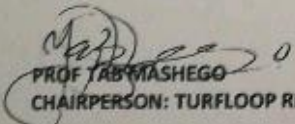
Researcher: J Mokwebo

Supervisor: Prof T Sodi

Co-Supervisor: Dr JP Mokwena

School: School of Social Sciences

Degree: Masters in Clinical Psychology


PROF T M MASHEGO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

Finding solutions for Africa

Appendix 6: Gatekeeper's permission to conduct the study



**University of Limpopo
Office of the Registrar**

Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2407, Fax: (015) 268 3048, Email: Office.Registrar@ul.ac.za

26 February 2018

Mr. J Mokwebo
201323828

Dear Mr. Mokwebo

GATEKEEPER PERMISSION TO CONDUCT RESEARCH

**TITLE: KNOWLEDGE AND ATTITUDES OF UNIVERSITY OF LIMPOPO'S
POSTGRADUATE STUDENTS TOWARDS MENTAL ILLNESS**

**SUPERVISOR: Prof. T Sodi
CO-SUPERVISOR: DR. JP Mokwena
SCHOOL: School of Social Sciences
DEGREE: Master in Clinical Psychology**

Kindly be informed that Gatekeeper permission is granted to you to conduct research at the University of Limpopo entitled: **"Knowledge and attitudes of University of Limpopo's Postgraduate Students towards Mental illness"**.

Kind regards,

**DR. JEFFREY MABELEBELE
UNIVERSITY REGISTRAR**

Cc. Prof. RJ Singh, Director: Research, Innovation and Partnerships
Dr. TE Mabila: Director, Research
Prof. TAB Mashego – Chairperson: Research and Ethics Committee
Ms. N Monene – Office Manager: Research Development and Administration

Appendix 7: Krejcie and Morgan's (1970) sample size determination table

Table 3.1									
<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*