Description of psychiatric nursing students’ stereotypical beliefs associated with mental illness labels and the potential mediating effects of information and contact.

A research project submitted to the College of Health Sciences
School of Nursing and Public Health
University of KwaZulu-Natal

in partial fulfilment of requirements for the Coursework for the degree
Of
Master of Nursing (Mental Health Nursing)

Researcher: C.M Mbongwe
Student Number: 991262279
Research Supervisor: Ms A.A.H. Smith

2014
DECLARATION

I, C.M. Mbongwe, declare that this dissertation titled “Description of psychiatric nursing student’s stereotypical beliefs associated with mental illness labels and the potential mediating effects of information and contact” is my original work. It has never been submitted before for any other degree or examination at any other University. I also declare that the sources of information used in this work have been acknowledged by means of reference.

This research project has been read and approved for submission by supervisor, Ms A.A.H. Smith

Mrs C.M Mbongwe
(Student number: 991262279)

Ms Amanda Smith
(Research Supervisor)
DEDICATION

This work is dedicated to my children, Ntuthuko and Amanda, for the encouragement and support they have given me throughout the study.

ACKNOWLEDGEMENTS

I would like to thank God Almighty for being with me throughout this journey.

My sincere thanks also go to:

Ms. Mandy Smith, my research supervisor, for her constant guidance, especially with the statistics, dedication, encouragement, support and willingness to answer all my questions throughout;

Mr. Ashley Govender, for helping me with some statistical tests conducted in the study;

All the KZCN lectures, especially Mrs. N.Radebe, Mrs. T. Zondi and Mrs. P. Ramsamy, for their assistance during the course of the study; and

Ms. Swart, my line manager, for her constant encouragement and support.
ABSTRACT

Aim
To describe psychiatric nursing students’ stereotypical beliefs associated with mental illness labels and the potential mediating effects of information provided from curriculum content and contact through clinical placement.

Methodology
Four nursing campuses were sampled, resulting in one hundred and thirty two (n=132) participants. Participants remained the same for all three phases of the repeated measure. A quantitative approach, non-experimental survey design with repeated measures made use of a self-report questionnaire. Section A included demographic data (age, gender and cultural group), while Section B consisted of a semantic differential measure (SDM) focusing on three mental illness labels; schizophrenia, major depressive disorder and bipolar mood disorder. Data was collected on the first day of the psychiatric nursing training block, the last day of the training block, and the first day of the second training block, after approximately six weeks of clinical placement in specialist psychiatric settings.

Results
Participant scores suggested greater negative stereotypical beliefs associated with the schizophrenia label in all the three phases of data collection. The bipolar mood disorder label was the least associated with negative stereotypical beliefs. Information given during the initial teaching block and contact during the clinical placement period resulted in a slight reduction of negative stereotypical beliefs associated with the schizophrenic label. In contrast negative stereotypical beliefs associated with the bipolar mood disorder label were increased slightly after information and contact.

Conclusion and recommendation
The results of the study confirmed that health care professionals are not different from the general population in their negative stereotypical beliefs towards mental illness labels. A review of the proposed new nursing curriculum should specifically include emphasis on psychosocial rehabilitation. In addition, clinical placement of the student nurses must be designed to ensure interaction with mental health care users engaged in recovery and community integration to remove perceptions of inability to recover associated with mental
illness labels (Adewuya & Oguntade, 2007; Adewuya & Makanjuola, 2008; Corrigan, 2007; Smith, 2010).
# TABLE OF CONTENTS

DECLARATION ................................................................................................................................. ii  
DEDICATION ................................................................................................................................. iii  
ACKNOWLEDGEMENTS ................................................................................................................ iii  
ABSTRACT .................................................................................................................................. iv  
TABLES, FIGURES AND ANNEXURES ......................................................................................... ix  
ABBREVIATIONS .......................................................................................................................... x  
CHAPTER ONE .............................................................................................................................. 1  
INTRODUCTION OF THE STUDY ................................................................................................. 1  
1.1 Background ........................................................................................................................... 1  
1.2 Statement of the problem ....................................................................................................... 5  
1.3 Purpose of the study ............................................................................................................... 5  
1.4 Significance of the study ....................................................................................................... 6  
1.5 Research objectives ............................................................................................................... 6  
1.6 Research questions ............................................................................................................... 7  
1.7 Operational definitions ....................................................................................................... 7  
1.8 The conceptual framework ................................................................................................. 8  
1.8.1 Unfolding of the conceptual framework in this study ...................................................... 10  
1.9 Summary ............................................................................................................................. 11  
CHAPTER TWO ........................................................................................................................... 12  
LITERATURE REVIEW ............................................................................................................... 12  
2.1 Introduction ......................................................................................................................... 12  
2.2 Stigma ................................................................................................................................. 12  
2.2.1 Public stigma .................................................................................................................. 13  
2.2.2 Self-Stigma .................................................................................................................... 16  
2.2.3 Structural stigma ............................................................................................................ 17  
2.3 Stigma associated with mental illness .................................................................................. 18  
2.4 Negative stereotypical beliefs associated with mental illness ............................................ 20  
2.5 The effects and impact of stigma on individuals with mental illness ............................... 22  
2.6 Health care professionals and mental illness stigma ......................................................... 23  
2.7 Ways to mitigate and reduce stigma ................................................................................... 24  
2.7.1 The effect of education and contact ............................................................................. 24  
2.7.2 The effects of clinical contact ....................................................................................... 27
CHAPTER THREE

2.8 Summary .................................................................................................................. 29
CHAPTER THREE ........................................................................................................... 30
METHODOLOGY ............................................................................................................. 30
3.1 Introduction ............................................................................................................. 30
3.2 Paradigm and research design ............................................................................. 30
3.3 Setting and target population .............................................................................. 30
3.4 Sample and sampling procedure ......................................................................... 31
3.5 Data collection instrument .................................................................................. 32
  3.5.1 Demographic data ............................................................................................. 32
  3.5.2 The Semantic Differential Measure (SDM) ...................................................... 32
  3.5.3 Validity and reliability of the SDM ................................................................. 33
3.6 Data collection process .......................................................................................... 34
3.7 Ethical considerations ............................................................................................ 35
3.8 Data analysis .......................................................................................................... 36
3.9 Summary ................................................................................................................ 36

CHAPTER FOUR ........................................................................................................... 37
DATA PRESENTATION AND ANALYSIS ...................................................................... 37
4.1 Introduction ............................................................................................................. 37
4.2 Description of the sample and its representativeness ....................................... 37
4.3 Semantic Differential Measure and the extent of negative stereotypes ........... 39
  4.3.1 Perceptions of dangerousness ........................................................................ 40
  4.3.2 Perceptions of unpredictability ...................................................................... 42
  4.3.3 Perceptions of dependency ............................................................................ 45
  4.3.4 Perceptions of communication .................................................................... 47
  4.3.5 Perceptions of Responsibility ..................................................................... 50
  4.3.6 Perceptions of ability to recover .................................................................. 53
4.4 Total scores on the SDM: First scores ................................................................. 56
  4.4.1 Phase one scores ............................................................................................ 56
  4.4.2 Phase two scores ........................................................................................... 57
  4.4.3 Phase three scores ......................................................................................... 58
4.5 Associations .......................................................................................................... 59
  4.5.1 Gender association ......................................................................................... 60
  4.5.2 Association with age ....................................................................................... 60
  4.5.3 Cultural associations ....................................................................................... 61
4.6 Summary ................................................................................................................. 61
CHAPTER FIVE .............................................................................................................. 63
DISCUSSIONS AND RECOMMENDATIONS ................................................................ 63
5.1 Introduction ........................................................................................................... 63
5.2 Discussion ............................................................................................................. 63
5.3 Limitations of the study ....................................................................................... 66
5.4 Recommendations ............................................................................................... 66
  5.4.1 Recommendations on education ................................................................. 66
  5.4.2 Recommendations on practice ................................................................. 67
  5.4.3 Recommendation on research ................................................................. 67
5.5 Conclusion ........................................................................................................... 67
REFERENCES ............................................................................................................. 68
TABLES, FIGURES AND ANNEXURES

TABLES:

Table 3.1: Sample from UKCN campuses.............................................................31
Table 3.2: Content validity of the Semantic Differential Measure..........................33
Table 4.1: Age distribution of participants.............................................................38
Table 4.2: Cultural distribution of participants.......................................................39
Table 4.3: Phase one - Perceptions of dangerousness.........................................40
Table 4.4: Phase two - Perceptions of dangerousness ...........................................41
Table 4.5: Phase three - Perceptions of dangerousness ........................................42
Table 4.6: Phase one - Perceptions of unpredictability........................................42
Table 4.7: Phase two - Perceptions of unpredictability........................................43
Table 4.8: Phase three - Perceptions of unpredictability......................................44
Table 4.9: Phase one - Perceptions of dependency................................................45
Table 4.10: Phase two - Perceptions of dependency...............................................46
Table 4.11: Phase three - Perceptions of dependency..........................................47
Table 4.12: Phase one - Perceptions of communication.......................................48
Table 4.13: Phase two - Perceptions of communication........................................49
Table 4.14: Phase three - Perceptions of communication.....................................50
Table 4.15: Phase one - Perceptions of responsibility..........................................51
Table 4.16: Phase two - Perceptions of responsibility..........................................52
Table 4.17: Phase three - Perceptions of communication....................................53
Table 4.18: Phase one - Perceptions of inability to recover from illness ............53
Table 4.19: Phase two - Perceptions of inability to recover................................54
Table 4.20: Phase three - Perceptions of inability to recover...............................55
Table 4.21: Total scores - phase one.................................................................57
Table 4.22: Total scores - phase two .................................................................58
Table 4.23: Total scores - phase three ...............................................................59

FIGURES:

Figure 1.1: Link and Phelan’s (2001) model of stigma......................................9
Figure 1.2: Unfolding of the conceptual framework...........................................10
Figure 4.3: Gender distribution of participants..................................................38
ANNEXURES:
Annexure A: Information and consent...........................................................73
Annexure B: Self report questionnaire ..........................................................75
Annexure C: Letters of permission to collect data KZNCH..................................78
Annexure D: Ethical clearance .........................................................................82
Annexure E: Histogram Distribution Curves....................................................83

ABBREVIATIONS
DOH Department of Health
PHC Primary Health Care
SMI Serious mental illness
WHO World Health Organization
MHCU Mental health care user
MHCP Mental health care practitioner
UKZN University of KwaZulu-Natal
CHAPTER ONE

INTRODUCTION OF THE STUDY

1.1 Background

Stigma comes from the Greek word, stigmata, referring to a mark of shame that distinguishes someone as being discredited, thus reducing the life chances of that individual (Overton & Medina, 2008). Link and Phelan (2001) suggest that stigma exists when the following five components are present: labeling, stereotyping, separating, status loss and discrimination.

A label is something that is affixed in the absence of qualification (Link & Phelan, 2001). Labels are social constructions, for example, one can be labeled because of skin color. These labels, believed to define certain categories, act as cues to a shared understanding of qualities fixed to the label. In other words, it is a cognitive process of recognizing that a person is different (Link & Phelan, 2001; Overton & Medina, 2008). Stereotypes, or labeled differences, separate the person or group being labeled as different from those who do not share the label (Link & Phelan, 2001). This leads to a separation of ‘us’ and ‘them’ (Link & Phelan, 2001). Prejudice resulting from stereotypes is associated with statements like, “I hate them”, or “they are dangerous and I’m scared of them” and results in status loss and discrimination (Link & Phelan, 2004; Overton & Medina, 2008). Stigmatized groups are disadvantaged in many aspects of life; education, housing, medical treatment and psychological wellbeing (Link & Phelan, 2004). The person who is being stigmatized is reduced in the minds of the stigmatizing group. This leads to loss of status and consequently results in social exclusion (Link & Phelan, 2004; Overton & Medina, 2008). Unfortunately, labeling occurs within the health care system and persons who are mentally ill are labeled during the assessment of the symptomatology. These labels are well known within society – such as schizophrenia – and have associated negative stereotypes that lead to separation, status loss and discrimination, the process of stigma.

Current literature points to different levels of stigma: public stigma, structural stigma and self-stigma (Corrigan, Kerr & Knudsen, 2005). Briefly, public stigma is a phenomenon whereby a large group of society displays their stereotyping attitudes towards a stigmatized group, such as people living with mental illness. According to Corrigan (2007) people with serious mental illness (SMI) are judged as being a menace to society, and are immoral and insane, indicating the stereotypes associated with a psychiatric label. Current literature
reveals that common negative stereotypes about mental illness are still evident and mentally ill people are perceived as being emotionally weak, responsible for their ill-health, dangerous and incompetent (Corrigan et al, 2005; Ogunsemi, Odusan & Olatawura, 2009; Ssebunnya, Kigozi, Lund, Kizza & Okello, 2009; Botha, Koen & Niehaus, 2006). Structural stigma manifests in legislation, policy and distribution of resources and results in people living with mental illness not receiving the same consideration and resources that “normal” people take for granted (Corrigan, 2004; Overton & Medina, 2008). Kakuma, Kleintjes, Lund, Drew and Green (2010) argue that persistent suffering, disability and economical loss associated with mental illness are the results of structural stigma. Lastly, people living with mental illness are suggested to develop feelings of self-hate, shame and guilt, diminishing their self-esteem and leading to limited self-efficacy. This is suggested to be associated with negative attitudes and behaviors, and indirect or direct messages received from the community. Thus the judgment of the community is accepted and applied by a person living with mental illness (Overton & Medina, 2008). This process of self-judgment is known as self-stigma (Overton & Medina, 2008).

International and local reports indicate that stigmatizing attitudes are not only evident among community members, but also among health care professionals (Ay, Save & Fidanoglu, 2006; Fernando, Dean & Mcleod, 2010; Kakuma et al., 2010; Trump & Hugo, 2006; Mavundla, Toth & Mphelane, 2009). It is suggested that this can have consequences on health seeking behavior and health care outcomes. Mentally ill people may delay seeking help, lose confidence in health care professionals and resort to consulting traditional practitioners, thus worsening their mental health status (Nsereko, Kizza, Kigozi, Ssebunnya & Ndyanaabangi, 2011; Ssebunnya et al, 2009). Stereotypical beliefs are associated with assumptions and perceptions of people, and those living with serious mental illness (SMI) are associated with being violent, dangerous, incompetent and weak. These negative judgments are often undeserved, as when a person who has been hospitalized for mental illness is associated with violence (Corrigan et al, 2005).

According to Overton & Medina (2008), the stigma process occurs when social labels connote a separation of “us” from “them”. These authors argue that people who are mentally ill are regarded as “they” or “them” and are perceived as being a menace to “us” because they are immoral and insane (Overton & Medina, 2008). When people are labeled because of their mental illness or behavior, they are set apart and excluded from the society (Overton &
Medina, 2008; Corrigan et al, 2005: Ssebunya et al, 2009). Therefore, once people have been labeled mentally ill, they are more likely to be unemployed or earn less than others in spite of their education, knowledge and qualifications (Overton & Medina, 2008). Employers discriminate against people living with SMI and those who have a history of admission to mental health institutions (MHI) by either refusing to hire them or finding an excuse to fire them once they become aware of their SMI status (Link & Phelan, 2001). Negative labeling and stereotypical beliefs regarding mentally ill persons result in them being reduced in the eyes of the stigmatizing group and being placed down on the status hierarchy (Overton & Medina, 2008).

Furthermore, apart from the stigma attached to mentally illness, people suffering from SMI are faced with other challenges whilst seeking mental health care (Overton & Medina, 2008). Research indicates that mental health care services receive inadequate funding and that lack of resources and an insufficient budget make it impossible for the mental health care users (MHCUs) to receive comprehensive services (Corrigan et al, 2005: Overton & Medina, 2008).

Education and contact are seen as mediating the effects of stigma as they are reported to have a positive impact on negative stereotypical beliefs, mitigating stigma by providing correct information and removing the myths about mental illness (Corrigan et al, 2005). Contact between members of different groups can lead to reduced prejudice and increased acceptance, especially under optimal conditions of equal status contact (Corrigan et al, 2005; Anagnostopoulos & Hantzi, 2011). Several authors argue that contact with mental illness may result in reduced intergroup anxiety and lesser desire for social distance (Anagnostopoulos & Hantzi, 2011; Corigan et al, 2005; Fernando et al., 2010) Improvement in attitudes seem to be most pronounced when contact is with a person who moderately disconfirms prevailing stereotypes (Corrigan et al, 2005). Although education can take the form of formal teaching, other educational strategies to reduce stigma include documentary films, movies, professional seminars, books and school projects (Corrigan et al., 2005; Fernando et al., 2010; Lauber, Nordt, Braunschweig & Rossler, 2006; Rusch, Angermeyer & Corrigan et al, 2005). Overton and Medina (2008) suggest that MHCPs should receive education about stigma and its impact on MHCUs. These authors recommend that educators could uplift standards of care for MHCUs by reviewing and expanding the existing curriculum by integrating new information into existing classes (Overton & Medina, 2008).
Psychiatric nursing is a core module within the South African nursing curricula (South African Nursing Council (SANC), 2012). During the psychiatric nursing module, student nurses are exposed to educational content and face to face contact with MHCUs. Several authors suggest that nurses’ academic input and clinical placement have a mediating effect on stigmatizing attitudes towards MHCUs (Ay et al., 2006; Corrigan & Shapiro, 2010; Fernando et al., 2010; Markstrom, Gyllensten, Bejerholm, Bjorkman & Brunt, 2009). According to studies conducted in different countries, educational approaches to stigma can change stereotypes about mental illness and replace inaccurate stereotypes with factual information (Corrigan, et al 2005; Gat, Abramowitz, Bentov-Gofrit & Cohen, 2007; Markstrom et al, 2009). The SANC regulations stipulate the minimum requirements for the education and training of a nurse, (General nursing, Psychiatry, Community and midwifery leading to registration). In these regulations ‘academic year’ means a period of at least 44 weeks in any calendar year; ‘course study’ means a programme of education and training approved in terms of section 15(3), leading to obtaining of a qualification which confers on the holder thereof the right to registration as a nurse; ‘nursing college’ means a post-secondary educational institution which offers professional nursing education and post-basic level, where such nursing education has been approved in terms of section 15(2). The curriculum consists of the following subjects: general nursing science, ethos and professional practice, community nursing science, midwifery and psychiatry nursing science, and the approach is the integration of various field of study (SANC, Regulations).

In recognition of the impact of negative stereotypical beliefs on the implementation of national and provincial policy, the South African Federation for Mental Health Care recommended implementation of public awareness campaigns to spread knowledge about mental illness (South African Federation for Mental Health, circular 02 of 2011). However, these recommendations do not recognize the MHCP, specifically nurses, as members of the public and make no specific mention of campaigns to address negative stereotypical beliefs amongst MHCPs (South African Federation for Mental Health, circular 02 of, 2011). Furthermore, although the National Mental Health Care Summit in April, 2012 placed stigma and social discrimination on the agenda, facilitating discussion and development of anti-stigma campaigns, It is suggested, there is no research pertaining to psychiatric nursing students’ mental illness stereotypical beliefs.
1.2 Statement of the problem

Various researchers have suggested that one of the barriers preventing effective access and involvement in mental health care treatment by MHCUs is related to their experience of stigmatizing attitudes from MHCPs (Kapungwe, Cooper, Mwanza, Mwape, Sikwese & Kakuma, 2010; Ssebunnya et al, 2009; Trump & Hugo, 2006). These authors argue that this affects the health care outcomes of the MHCUs. It has been suggested that people with mental illness may not start treatment or adhere to the prescribed treatment because of the psychiatric label that often stems from the psychiatric services (Rusch et al, 2005; Ssesebunya et al, 2009). Furthermore, MHCUs have described experiences of being spoken to as if they were children, not being included in decision making about their future care and being seen as people who are unable to take full responsibility of their own illness by health care professionals (Thornicroft, Brohan, Kassam & Lewis-Holmes, 2008). MHCUs have also reported that MHCPs, especially nurses, are particularly stigmatizing towards patients with schizophrenia, labelling them with names such as “cases” or “malalu”, meaning he is mad (Ssesebunya et al, 2009; Nsereko, Kizza, Ssebunnya, Ndyanabangi & Flisher, 2011). These authors argue that when someone is referred to like that, he will never go back to the health facility for treatment, resulting in relapse and disability (Nsereko et al, 2011).

Previous studies indicate that educational input and exposure to mentally ill persons can influence stigma components, specifically negative stereotypical beliefs (Corrigan, et al 2005; Corrigan & Shapiro, 2010; Markstrom et al., 2009). It is therefore important to continue to explore and design professional curricula and clinical placements to facilitate stigma reduction (Kakuma et al., 2010; Markstrom et al., 2009; Thornicroft et al., 2008). However, there is no local research on the mediating effect of education and contact inherent in teaching modules of MHCPs, specifically nurses, which can be used to inform module or course development.

1.3 Purpose of the study

The purpose of this study is to describe psychiatric nurse students’ stereotypical beliefs associated with specific psychiatric labels and the mediating effects of knowledge and contact on these stereotypical beliefs.
1.4 Significance of the study

Exploring MHCPs’, specifically nurses’, stigmatizing beliefs associated with specific psychiatric labels may inform further nursing research aimed at curriculum design, knowledge content and clinical placement. In addition, the mediating effects of knowledge and contact amongst nurses may add to anti-stigma literature and guide further research amongst MHCPs (Corrigan et al., 2005: Corrigan & Shapiro, 2010).

The study will add to the foundation literature as it relates to negative stereotypical beliefs amongst MHCPs, and may increase understanding of the mediating effects of knowledge and contact within a specific professional context. Identification of negative stereotypical beliefs amongst MHCPs, specifically nurses, may inform service managers and the district and provincial health officials in the implementation of strategies to mitigate these stigmatizing attitudes to improve patient care. The data may inform policy development as managers may be able to look at development of policies and protocols that focus on methods of mitigating stigma among health care professionals (Overton & Medina, 2008).

It is possible that mental health nurse educators may utilize the findings by restructuring the curriculum and clinical placement schedule and in this way improve nursing practice (Kakuma et al., 2010; Markstrom et al., 2009; Thornicroft, Brohan, Kassam & Lewis-Holmes, 2009). In addition, the results of this study may facilitate critical reflection amongst participants and influence their nursing practice (Corrigan & Shapiro, 2010).

1.5 Research objectives

The research objectives are twofold:

- To describe the stereotypical beliefs associated with specific mental illness labels of student nurses completing the psychiatric nursing component of the four year diploma nursing program (R425) in the eThekwini District of KwaZulu-Natal.
- To describe the mediating effect/s of knowledge and contact as they relate to stereotypical beliefs associated with specific mental illness labels, reported by student nurses completing the psychiatric nursing component of the four year nursing program (R425) in the eThekwini District of KwaZulu-Natal.
1.6 Research questions

For readability, the research questions are presented in relation to the respective research objectives:

Research questions for objective one:

- What stereotypical beliefs, in relation to specific psychiatry labels (schizophrenia, bipolar mood disorder, major depressive disorder) are more or less evident among student nurses before beginning the psychiatric nursing component?
- What stereotypical beliefs, in relation to specific psychiatry labels (schizophrenia, bipolar mood disorder, major depressive disorder) are more or less evident among student nurses after the completion of the first academic block of the psychiatric nursing component?
- What stereotypical beliefs, in relation to specific psychiatry labels (schizophrenia, bipolar mood disorder, major depressive disorder) are more or less evident among student nurses after the completion of the first clinical placement of the psychiatric nursing component?

Research questions for objective two:

- How and to what extent does knowledge of specific psychiatric labels influence stereotypical beliefs of student nurses engaged in the psychiatric nursing component?
- How and to what extent does contact influence the stereotypical beliefs of student nurses engaged in the psychiatric nursing component?
- What is the nature and extent of the relationship between demographic data, knowledge, contact; and stereotypical beliefs among student nurses engaged in the psychiatric nursing component?

1.7 Operational definitions

Knowledge / Education: Education is defined as a method of conveying factual information to a specific population and in this case it is believed that it helps to reduce stigma towards
mentally ill people (Overton & Medina, 2008). For the purpose of this study, knowledge is defined as the lecture content of the first block of the psychiatric nursing science module that forms part of the four year nursing diploma (R425).

**Familiarity / Contact:** Corrigan et al (2001) define familiarity as direct experience or contact with a person who has a mental illness. For the purpose of this study, contact refers to the student nurses’ clinical placements in a psychiatric institution or community setting.

**A mental health care practitioner** (MHCP) refers to a psychiatrist, registered medical practitioner or nurse, occupational therapist, psychologist or social worker, who has been trained to provide prescribed mental health care treatment and rehabilitation as defined in the Mental Health Care Act 17 of 2002. For the purpose of this study, a MHCP refers to a student psychiatric nurse completing the psychiatric component of the four year diploma (R425).

**A psychiatric label** is an official diagnosis that is given to a normal person which differentiates him/her from other people. Such people are thus viewed negatively and rejected from all aspects of life by the society in which they live (Ogunsemi et al., 2008).

**Stereotypical beliefs** are defined as knowledge structures that are learned by most members of a social group to categorize certain members of the group. These often result in prejudice (Overton & Medina, 2008).

**Mediating** may be described as an internal psychological ‘variable’ that accounts for the relationship between two “external physical constructs or experiences”. In this study, mediating is used to describe the variance in stereotypical beliefs after education and contact.

**Stigma** is defined as an “attribute that is deeply discrediting” and that reduces the bearer “from a whole and usual person to a tainted, discounted one” (Goffman 1963, p. 3 cited in Link & Phelan, 2001). For the purpose of this study, the stigma construct of stereotypical beliefs is the used to reflect stigmatizing attitudes

### 1.8 The conceptual framework

This study draws on the conceptual framework of Link and Phelan (2001), represented in figure 1, which describes five components of stigma: labeling, stereotyping, separating,
emotional reaction, and status loss and discrimination (Link & Phelan, 2001). According to Link and Phelan's (2001) conceptualization, stigma exist when these components converge. Stereotypical beliefs are generalized beliefs about the characteristics, attributes and behaviors of people who have been categorized as a member of a particular social group. For example, people diagnosed with schizophrenia are commonly perceived to be dangerous (Corrigan, 2005; Major O’ Brien, 2005).

![Figure 1.1: Link and Phelan’s (2001) model of stigma](image)

Stereotypical beliefs are associated with certain variables such as age, gender, culture, and familiarity (some level of contact) with the person who represents the particular social group (Link & Phelan, 2001; Link, Yang, Phelan & Collins, 2004). Social separating is exclusion, separating “us” and “them”. This is usually associated with the stigmatized person being thought of as different from “us”, not really human, which can lead to discriminatory treatment of “them” (Link & Phelan, 2001; Link et al., 2004). Discrimination is a behavioral response to the emotions and beliefs generated by prejudice, which generally culminates in a desire for social distance from the stigmatized group (Overton & Medina, 2008). Such an emotional response is often detected by the person who is being stigmatized. For example, a person might display signs of anxiety or pity towards a member of the stigmatized group, which, if obvious to the person being stigmatized, can evoke emotions of anger, shame and embarrassment (Link & Phelan, 2001). According to Link and Phelan (2001), stigma is entirely dependent on social, economic and political power. These authors argue that in order for stigma to unfold, the stigmatizing group should be in a more powerful position than the stigmatized group, and that those with less power will therefore be unable to implement social discrimination on a more powerful group.
1.8.1 Unfolding of the conceptual framework in this study

This study focuses on the stereotypical belief component of the stigmatizing process (Link & Phelan, 2001). Corrigan and colleagues’ (2001; 2004; 2005) descriptions of familiarity / contact and knowledge in the unfolding the stigma process have also been utilized in this study.

The application of these concepts is illustrated in figure 1.2 below in which labeling and stereotyping are combined. Labeling within mental health care services is achieved through the application of a psychiatric label from the Diagnostic and Statistical Manual during the mental health assessment. Thus, the MHCUs) that student nurses will meet during their clinical placement, after the initial academic block, will already have had a psychiatric label applied to them. Figure 1.2 indicates specific stereotypical beliefs associated with the psychiatric labels, which will be measured repeatedly: before academic input; again, after academic input, but before clinical contact; and finally, after clinical contact. Thus, the last ‘after’ measure combines academic input with contact. The study aims to include knowledge and contact as potential mediators of student nurses’ stereotypical beliefs (Link & Phelan, 2001, Corrigan et al, 2005).

![Figure 1.2: Unfolding of the conceptual framework](image-url)

All the target labels (schizophrenia, bipolar mood disorder and major depressive disorder) are included in the academic input during the first block of the psychiatric nursing component
The KZNCN (2012) course content indicates that etiological theories, disease process and nursing interventions are covered for each of the target labels.

Student nurses’ clinical placement can be within a psychiatric hospital or a community psychiatric clinic. The clinical venue – hospital or community clinic- will be viewed as a variable that may mediate stereotypical beliefs. In addition, personal variables such as age, gender and cultural group will be associated with stereotypical beliefs to establish the possibility of their mediating effects on stereotypical beliefs.

1.9 Summary

This chapter has outlined the background, purpose, significance, objectives and conceptual framework of the study. The next chapter will discuss the literature review with regard to stigmatizing attitudes associated with mental illness.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The literature review for this study focuses on public stigma as it relates to mental health care practitioners (MHCPs). The focus will be on labeling, stereotypical beliefs and separating, which lead to discrimination. The effects of stigma on an individual and the effect of education and contact will be reviewed, as outlined by several authors in different studies that have been conducted in different countries. Public stigma denotes the reaction of the general public to a certain group of people and it comprises three components: stereotype, prejudice and discrimination. Contact and education have been reviewed as possible mediators of the stigmatizing process and their effectiveness in stigma reduction.

2.2 Stigma

The term stigma has been adopted from the word stigmata, referring to a mark of shame, a stain, or an identifying mark or characteristic, reducing the life chances of an individual (Overton & Medina, 2008). Some stigmatizing attitudes are based on physical characteristics, such as the color of the skin or body size, such as obesity (Corrigan, 2007; Link & Phelan, 2001, Rusch et al., 2010). The stigma associated with mental illness deprives people labeled “mentally ill” of important life opportunities (Corrigan et al., 2007; Overton & Medina, 2008, Link & Phelan 2001; Rusch et al., 2010. Some stigmas are hidden and are only based on association. For example, if someone has observed someone else entering or leaving a psychiatric clinic it can raise the assumption that the person seen at the psychiatric clinic is mentally ill (Corrigan, 2007).

There are four components to stigma. The first component is when people distinguish and label human differences and the second is when cultural beliefs link labeled persons to undesirable characteristics (Anagnostopoulos & Hantzi, 2011; Link & Phelan, 2001; Smith, 2010). In the third component, labeled persons are placed in different categories to accomplish some degree of separation of “them” from “us”, which leads us to believe that they are fundamentally different from ‘us’ and they appear to be completely different from other groups of people who do not share a negative label (Corrigan et al., 2005; Rusch et al., 2005; Link & Phelan, 2001; Rusch et al., 2010; Padurariu, Ciobica, Persson & Stefanescu, 2011).
In the fourth component, labeled persons experience status loss and discrimination, which leads to unequal outcomes (Link & Phelan, 2001; Rusch, Corrigan, Wassel, Michaels & Olschewski, 2009; Smith, 2010; Anagnostopoulos & Hantzi, 2011). A label is defined by Link and Phelan (2001) as something that is affixed, like an ‘attribute’, condition or mark. A label links a person to a set of undesirable characteristics that form the stereotypical belief (Corrigan et al., 2005; Link & Phelan, 2001; Rusch et al., 2010).

Serious mental illness (SMI) is a label used in literature to identify patients suffering from mental illnesses, such as schizophrenia, bipolar mood disorder and major depressive disorder (Smith, 2010). Diagnosis may exacerbate stigma by acting as a cue that signals stereotypes, prejudice and discrimination. A cue is a process of recognizing that something is different about a particular person, which may be physical, observable, such as a difference in physical appearance or psychiatric symptoms (Overton & Medina, 2008; Rusch et al., 2010 Nsereko et al., 2011). In several studies, schizophrenia has been perceived as more violent and dangerous than the other psychiatric labels (Corrigan, 2007; Putman, 2008; Nsereko et al., 2011; Rusch et al., 2010. A person with depression is less stigmatized by other patients, health care providers and other community members than a person with schizophrenia (Putman, 2008; Nsereko et al., 2011; Smith, 2010)

2.2.1 Public stigma

Public stigma occurs when large segments of the general public agree on the negative stereotypical belief (Corrigan et al, 2005; Corrigan & Shapiro, 2010; Overton & Medina, 2008; Padurariu et al., 2011). Public stigma not only impacts the mentally ill persons, but also family members and friends of persons living with SMI (Corrigan et al, 2005; Corrigan & Shapiro, 2010; Padurariu et al., 2011). Common stereotypical beliefs about people with mental illness are that they dangerous, unpredictable, incompetent, difficult to communicate with and potentially violent (Corrigan et al, 2005; Corrigan & Shapiro, 2010; Padurariu et al., 2011). Public prejudice results from stereotypical beliefs and may lead to varied types of deprivation, including loss of work opportunities (Corrigan et al, 2005; Corrigan & Shapiro, 2011; Overton & Medina, 2008; Padurariu et al., 2010). Statements such as ‘’I hate them’’ or ‘they are dangerous’ and I’m scared of them’’ are common examples of prejudice (Adewuya & Makanjuola, 2008, Overton & Medina, 2008; Padurariu et al., 2011). Research suggests that people living with mental illness, especially those who have been previously hospitalized find it difficult to get an empathetic and supporting relationship from the community, their
relatives and sometimes even from the MHCPs (Overton & Medina, 2008). They are faced with a lot of discriminatory barriers, including being turned down for jobs, for which they are qualified, and being denied housing (Overton & Medina, 2008; Ssebunnya et al., 2009; Thornicroft et al., 2009). Studies have shown that people living with SMI are viewed by the community as people who will never recover from their illnesses, as compared to people with other illnesses (Corrigan, 2007). This kind of myth prevents people with psychiatric disorders from pursuing their goals, resulting in reduced self-esteem and self-efficacy (Corrigan, 2007).

Ssebunnya et al. (2009) argue that people who have been labeled mentally ill are ostracized by their family and relatives, leading to limited access to all opportunities that can enhance their economic wellbeing. One of the participants that was interviewed in their study verbalized,

“Of course nobody can employ you if they know that you have mental illness. But if you get someone who doesn’t know that you are a person with mental illness, he may employ you, and you will do his work well, but the moment someone tips him off that you have mental illness, I tell you, you will not last there. He will look for an excuse and eventually fire you” (SSI, mental health service consumer 4, in Ssebunnya et al., 2009)

The few studies conducted among people with urban-rural differences came up with contradicting results. Two studies confirmed that people with higher educational levels had a strong desire for social distance towards mentally ill people (Angermeyer & Dietrich, 2006; Muga & Jenkins, 2008). In a study conducted by Rusch et al. (2010), people with mental illness were perceived by some members of the community who participated in the study as being responsible for their illness, while others perceived that they did not succeed because they are lazy. Research suggests that the Nigerian community also hold negative attitudes towards people living with mental illness (Gureje, Lasebikan, Oluwanuga, and Olley, 2005). These researchers conducted a survey among the Yoruba speaking people of Nigeria, who were aged 18 years and above, some from the rural areas of Nigeria and others from southwestern Nigeria. Most respondents expressed the view that substance abuse (alcohol or drugs) could result in mental illness (Gureje et al., 2005). Because respondents had a strong belief in supernatural powers, they perceived that mental illness was caused by possession by evil spirits and that people who are mentally are being punished for the wrong things that
they have done. Only one in ten respondents believed that biological factors or brain disease could be the cause (Gureje et al., 2005).

In a South African study conducted in 2006 by Botha Koen and Niehaus, most respondents described schizophrenia and epilepsy as illnesses, but regarded depression as a simple problem, which shows that stigmatizing attitudes are higher towards schizophrenia than other mental illnesses (Botha, Koen & Niehaus, 2006). A large percentage (67%) of respondents believed that witchcraft and possession by evil spirits contribute to the development of schizophrenia and 52% displayed high levels of stereotypical beliefs towards mentally ill people, especially schizophrenia, associating them with poor prognosis, dangerousness and being violent (Botha et al., 2006). Findings from a study conducted in Iraq to explore public perceptions about mental illness also revealed high levels of stereotypical perceptions regarding mental illness (Sadik, Bradley, Al-Hasoon & Jenkins, 2010). The results of the survey, which was carried out among 500 participants who were asked to complete a questionnaire which was available in two languages, showed that while 60% of the respondents agreed with the statement that mental illness is caused by brain disease; half agreed that it is caused by genetic inheritance and half agreed that substance abuse was the cause of mental illness. Two thirds of the participants viewed personal weakness as the cause of mental illness, while less than a third believed mental illness is God’s punishment (Sadik, et al, 2010). Half of the respondents thought people with mental illness should not get married and should not have children and half thought one should avoid having any contact with a person with mental illness. Less than one fifth thought they could maintain a friendship with someone with mental illness or even marry someone with mental illness. Three quarters of the respondents indicated that they would not want anyone to know if they had mental illness and would be ashamed if someone in their family had a mental illness. Nearly half of the respondents believed someone with mental illness could recover, while nearly half disagreed with the statement and believed that someone with mental illness cannot be cured. Two thirds believed people who are mentally ill should be in an institution under supervision and control while over two thirds agreed that mental illness can be treated outside of hospital (Sadik et al., 2010).
2.2.2 Self-Stigma

Goffman 1963 suggested that people with mental illness become disfavored and dishonored in the eyes of society and are often recognized and judged as being outcasts, which affects the personal aspects of their lives (Baumann, 2007; Overton & Medina, 2008). People suffering from mental illness, specifically schizophrenia, are often exposed to public prejudice and internalizing these negative attitudes about themselves results in self-stigma (Rusch et al., 2010).

Self-stigma is an internal evaluation process whereby people judge themselves because of the negative attitudes that they receive from society (Baumann, 2007; Corrigan et al., 2005; Overton & Medina, 2008). This judgment is suggested to decreases self-esteem as the person often tells himself that he/she is not good enough or he/she is different from other members of the society (Baumann, 2007; Overton & Medina, 2008; Corrigan et al., 2005). People with mental illness who live in a society that endorses stigmatizing attitudes or ideas may internalize these ideas and believe that they are different from other members of the society and that they are weak because of their psychiatric disorder (Link & Phelan, 2001; Corrigan, 2007). Self-stigma is defined by several authors as a private shame that causes self-doubt as to whether one can live independently, hold a job, have one’s own shelter or find a life partner (Corrigan et al, 2005, Overton & Medina, 2008; Rusch et al., 2010). Self-stigma results in several negative consequences, including diminished self-efficiency and not adhering to treatment (Padurariu et al., 2011). Internalization of stigma is associated with social withdrawal and depressive symptoms caused by very painful experiences of rejection from the community, including the health care professionals (Padurariu, et al, 2009; Padurairu et al., 2011; Thornicroft, Rose & Kassam, 2007; Thornicroft et al., 2009).

Research has suggested that many people choose not to seek medical help because they are afraid of being labeled as ‘a mental patient” or suffer the discrimination that the label carries (Corrigan, 2007). The diagnostic label is seen as to create a power differential as it can introduce notions of vulnerability and perpetuate resistance to a sustained sense of wellness (Hayne, 2003). In a study conducted in Canada among people living with schizophrenia, participants described the experience of schizophrenia as a ‘descent to hell’ (Noiseux & Ricard, 2008). The participants described specific negative symptoms, such as visual and auditory hallucinations, explaining that these provoke both psychological and physiological pain to an extent that they experiences repercussions in all aspects of life (Noiseux & Ricard,
All the participants described schizophrenia as a chronic condition, saying that they will have to take drugs for the rest of their lives (Noiseux & Ricard, 2008). They describe the pain of experiencing recurring symptoms of the disease, which requires medical follow up, treatment and even hospitalization, often making their dearest wishes unattainable (Noiseux & Ricard, 2008).

Similarities were found in a study which was conducted in Chicago among people with SMI and members of the public using a response-latency task, the Brief Implicit Test, to examine the guilt related implicit negative stereotypes about mental illness (Rusch et al, 2010). Eighty-five people with SMI were recruited from outpatient mental health centers in Chicago. Participants were, on average, about 54 years of age and about two thirds were male. Axis I diagnoses were made using the Mini International Neuropsychiatric Interview based on DSM-IV criteria (Rusch et al, 2010). The findings showed that 35% of the participants had bipolar I or II disorder, and 27% of the participants had schizophrenia and had been hospitalized in psychiatric institutions about nine times (M = 9.2, SD =13.1) (Rusch et al, 2010). Both groups of participants completed Corrigan’s Attribution questionnaire, which assessed two typical negative stereotypical beliefs, namely that people with mental illness are responsible for their condition and that they are dangerous (Rusch et al., 2010). Participants also completed the stereotype agreement with negative stereotypes about people with mental illness, for example “I think most people with mental illness are cannot be trusted” (Rusch et al., 2010). The self-stigma in mental illness scale was also used to measure the degree to which people with mental illness not only agree with stereotypical beliefs, but also apply them to themselves resulting in a loss of self-esteem whereby they see themselves as people who cannot be trusted and therefore have no respect for themselves (Rusch et al., 2010). The results were as follows: n=85 stereotype agreement, M (SD) 32.1 (17.0), Responsibility, M (SD) 11.2 (4.9), Dangerousness, M (SD) 9.2 (5.2), Self-stigma, M (SD) 23.5 (14.4) (Rusch et al., 2010).

### 2.2.3 Structural stigma

Structural stigma is defined as an external evaluation of a person that is based on societal norms and is a process which denies people with a mental illness their entitlement to things that people who are considered normal take for granted (Corrigan et al, 2005; Link & Phelan, 2001; Rusch et al, 2010; Wallace, 2010). It is a process which involves the recognition of cues that a person has mental illness, which activates stereotypical beliefs, prejudice and
discrimination against that person (Corrigan et al., 2005; Link & Phelan, 2001; Overton & Medina, 2008; Smith, 2010). Structural stigma also manifests within legislation and policy. Kakuma et al. (2010) argue that persistent suffering, disability and economical loss associated with mental illness are results of structural stigma. People with mental illness also find it difficult to access financial resources and insurance benefits for mental health problems, as compared to those provided for other general health problems, which makes it difficult for them to access the treatment and emotional support that they need (Overton & Medina, 2008).

The impact of stigma on mentally ill people results in less employment opportunities, limitations in finding adequate shelter, barriers in obtaining treatment and negative attitudes of mental health professionals (Overton & Medina, 2008). Local research suggests that stigma still plays a major role in the persistent suffering, disability and economical loss associated with mental illness (Kakuma et al., 2010; Smith, 2010)

2.3 Stigma associated with mental illness

A research study was conducted in Greece at the University of Social and Political Sciences, the purpose of which was to examine prejudiced attitudes as a factor associated with social distance from people with mental illness (Anagnostopoulos & Hantzi, 2011). A total of 289 university student participants (28.4% men and 71.6% women) aged between 18 and 27 years old completed a written questionnaire assessing social distance from, prejudiced attitudes and familiarity with mental illness (Anagnostopoulos & Hantzi, 2011). Social distance from people with mental illness was measured using the social distance scale and familiarity was assessed using the level of contact report. This instrument listed some contact situations of varying degrees of intimacy with a person with mental illness, ranging from low intimate contact like ‘I have watched a movie or television show in which a character depicted a person with mental illness’ to high intimacy like ‘I live with a person who has a severe mental illness’. The results reflected negative attitudes about mental illness and indicated that factors, explaining 26.3% of the total variance, could be social restriction (“Although patients discharged from mental hospitals may seem alright, they should not be allowed to marry”) and social stigmatization (“People with mental illness let their emotions control them, normal people think things out”) (Anagnostopoulos & Hantzi, 2011).
Johnstone’s (2001, p.201) statement, ‘people suffering from mental health problems are among the most stigmatized, marginalized, disadvantaged and vulnerable members of our society’ is supported in current literature (Overton & Medina, 2008; Corrigan, 2007; Rusch et al., 2010). According to Corrigan (2007), people with schizophrenia and other serious mental illnesses will experience inevitable downfall, which will end up making them demented and incompetent. He went so far as to say that it is useless to try any form of intervention because a person with mental illness will end up back in a psychiatric ward, meaning that there is no hope for recovery. Kraepelin’s (in Corrigan, 2007), idea has been proved wrong by researchers in Vermont and Switzerland who followed a number of patients with SMI for more than 30 years and discovered that between half to almost two-thirds of the sample no longer required hospitalization, were able to work and live comfortable lives with their friends and relatives (Corrigan, 2007). Although Kraepelin’s work (in Corrigan, 2007) is old, it is still reflected in modern psychopathology tests, as well as in the third revised edition of DSM (Corrigan, 2007).

Although many developing countries like Kenya, Tanzania and Nigeria have undergone changes in their health care policies, which included decentralization of mental health care, there has been no evidence of change in the public’s views about mental illness (Muga & Jekins, 2008). According to Overton and Medina (2008), 30% of people with mental illness actually seek treatment, and approximately 40% of people who have SMI (e.g. schizophrenia) and who attempted to get treatment, failed to adhere to the treatment. These authors argue that the effects of stigma influence the way in which a person with mental illness seeks medical help and the efficacy of treatment, leading to poor treatment outcomes (Overton & Medina, 2008).

The media also perpetuates structural stigma as it regularly depicts mentally ill people as being dangerous, violent individuals, who are often portrayed as potential killers (Overton & Medina, 2008). Mentally ill people are not only depicted as violent, but also as unpredictable failures, asocial, incompetent, untrustworthy and being social outcasts (Overton & Medina, 2008). When people with mental illness perceive that people who constitute their support systems regard them in this way, it makes their functioning difficult (Overton & Medina, 2008).

In 2009, Ssebunnya conducted research among members of a community in Uganda and found that people living with mental illness often find themselves not only being rejected by
community members, but also being rejected by their relatives, family members and friends. In the same study, teachers who were interviewed indicated that children with mental illness are less likely to attend school and that if mental illness develops while they are at school; they are forced to drop out because of negative attitudes and comments they receive from their teachers and their schoolmates. They also indicated that the parents of a mentally ill child feel ashamed to send the child to school after the onset of mental illness or feel that sending a mentally ill child would be a total loss of money (Ssebunya et al., 2009).

Studies conducted in Greece revealed that younger people had more positive attitudes in relation to people with mental illness, while woman, older people and the less educated displayed negative attitudes (Arvaniti, Samakouri, Bochtsou, & Livaditis, 2009). A high percentage of respondents denied mentally ill people the basic rights of being allowed to vote, getting married or being admitted to the same hospitals as patients with other physical illnesses (Arvaniti, et al., 2009).

This is similar to the Kenyan study conducted by Muga and Jenkins (2008). A questionnaire was distributed to participants, which included questions such as “what might have caused the person to become ill?”, “could such a person continue living with the family?” and “could such a person continue studying or working?” Three hundred and fifty three (353) participants completed the questionnaire aged from 18 to 80 years and findings showed high levels of stigmatizing attitudes as they felt that a person with schizophrenia or other psychosis was not fit to get married, study or work and were potentially dangerous, although they should be allowed to stay with their family members (Muga & Jenkins, 2008).

2.4 Negative stereotypical beliefs associated with mental illness

Stereotypes are defined as structures that are learned by most members of a social group (Corrigan, 2004; Overton & Medina, 2008; Rusch et al., 2005). Prejudice results from cognitive and affective responses to stereotypical beliefs, such as reflective disgust, which is accompanied by a fear of contamination (Overton & Medina, 2008). Statements such as ‘I hate them’ or ‘they are dangerous and I’m scared of them’ are common examples of prejudice that leads to discrimination (Corrigan et al., 2005; Overton & Medina, 2008; Rusch et al., 2010). One of the stereotypical beliefs associated with mental illness is that people living with mental illness are unlikely to recover, an opinion that is reflected in many writings about the prognoses of people with mental illnesses (Corrigan, et al., 2005; Corrigan, 2007).
Faced with such negative feedback, people living with mental illness see themselves in a negative light (Overton & Medina, 2008). This leads to feelings of self-blame, self-doubt and sadness, which leads to anxiety, irritability and increased risk of suicide (Padurariu et al., 2011). Patients who have been hospitalized for mental illness are more stigmatized and as a result become defensive and withdrawn and show a lack of trust in other people, which reduces their interaction with others (Padurariu et al., 2011). The presence of a mentally ill patient in the family can be a burden, both physically and psychologically, as psychiatric patients with self-stigma can be difficult, irritable and suspicious (Padurariu et al., 2011).

Adewuya and Makanjuola, (2008) conducted another study in south-western Nigeria among three selected communities to explore stigmatizing attitudes of the community members towards people with SMI. They used a questionnaire designed by Angermeyer et al. 2004 covering two stereotypical beliefs of mental illness: perceived dangerous and perceived dependent These two stereotypical beliefs included five attributes: unpredictability, lacking self-control, aggressive, frightening and dangerous. Respondents were asked to indicate if these attributes applied to the mentally ill (Adewuya & Makanjuola, 2008). The respondents were assessed on possible causal factors of mental illness, which included substance abuse, alcohol abuse, witchcraft, punishment by God for the wrong deeds and bad luck (Adewuya & Makanjuola, 2008). Social distance was measured with a modified version of the Bagardus social distance scale (for measuring social distance). The respondents were categorized as having a low social distance as 52.0% indicated that they would definitely not feel ashamed if people knew that they had a family member who is living with mental illness, 42% were definitely not be afraid to have a conversation with someone with mental illness 27.9% were not disturbed by the thought of working with someone with mental illness, 19.3% were not disturbed by the idea of sharing a room with someone with mental illness and 4.2% indicated they would not get married to someone with mental illness (Adewuya & Makanjuola, 2008).

In a study conducted in South Africa among patients with schizophrenia, 58% of the participants indicated that they have been subjected to verbal abuse and name calling, while 39% indicated that they had been victims of physical abuse because of their mental illness (Botha et al., 2006). Another local study carried out by Smith (2010) reported major depressive disorder being associated with more negative stereotypical beliefs than schizophrenia, while bipolar mood disorder was associated with the least negative stereotypical beliefs.
On the other hand, other surveys have found that stereotypical beliefs do not always lead to diminished self-esteem and that people living with SMI who do not identify with the stigmatized group are likely to remain indifferent to stigma because they feel that the prejudices and discrimination do not refer to them (Corrigan et al., 2005; Rusch et al., 2005). If people with SMI regard public stigma as unfair, they will probably react with anger, which, in turn, can make them more active in empowerment efforts which targets the quality of services (Rusch et al., 2005).

2.5 The effects and impact of stigma on individuals with mental illness

There is strong evidence that mental health care users (MHCUs) have less access to primary health care and also receive inferior care for other medical conditions. They are often not taken seriously when they try to raise their concerns about other physical problems that they experience, which increases their risk of premature death (Thornicroft et al., 2007). Overton and Medina (2008) report that less than 30% of people with a mental health diagnosis actually seek treatment because of stigma attached to the diagnosis and 40% of people who have a SMI such as schizophrenia find it difficult to access health care services.

In a research study that was conducted in South Africa by Trump and Hugo (2006) among people living with SMI, 52% of respondents revealed that mental illness had caused tension with their spouse or partner, 26% recorded that their illness has led either to separation or divorce and 49% reported that their illness had negatively affected their family relationships with parents, siblings and their children (Trump & Hugo, 2006). Although 47% lost friends, 29% gained friends, which was facilitated through attendance of support group meetings (Trump & Hugo, 2006). These researchers reported that 62% of the respondents described mental illness as a destructive experience for them, 51% felt that their self-knowledge had improved, while 52% experienced a loss in self-confidence (Trump & Hugo, 2006).

Thornicroft et al. (2007) argue that many people living with mental illness avoid contacting psychiatric services because they believe that treatments are ineffective and have unpleasant side effects and that they would be shunned by their friends and relatives. In a study conducted in Uganda among stakeholders from various sectors, including mental health service users, the respondents who had mental illness stated that poverty in Uganda worsens the condition of mental illness since it is difficult to access healthcare services, especially for those living in remote areas, because people with mental illness are not entitled to a disability
grant (Ssebunnya et al., 2009). This prolongs the period for which the poor people battle with their mental illness, worsening the effects and thereby exposing them to more stigma (Ssebunnya et al., 2009). Some health care professionals that were interviewed pointed out that people living with mental illness prefer not to disclose details of their mental illness. One participant illustrated, “As you take history you may realize that it is mental illness, but when you ask, they deny. They deliberately decide to give confusing history of the problem” (SSI, PHC doctor, urban district). They also choose to stop contact with mental health services before making a full recovery because of dissatisfaction with the care that they get from health care professionals, including the psychiatrists and mental health nurses (Thornicroft et al., 2007).

2.6 Health care professionals and mental illness stigma

Although health care professionals have frequent contact with people who are labeled mentally ill, they tend to endorse the stigma (Corrigan, 2007). Mental health professionals use diagnosis and nosology to describe people living with SMI as outlined in Diagnostic and Statistical Manual of Mental Disorders (4th edition, or DSM-IV TR), (Statistical Classification of disease related and Health related problems (10th ed.) and American Psychiatric Association [APA], 1994).

People with SMI are viewed negatively by both the public and mental health care practitioners (MHCPs) (Adewuya & Oguntade, 2007; Muga & Jekins, 2008; Ogunsemi et al., 2008; Thornicroft et al., 2008). Mental health care users report that health care professionals stigmatize them, which they find very disturbing. In a study conducted in Switzerland, it was discovered that there was little difference between the general public and the psychiatrists in terms of social distance towards mentally ill people (Thornicroft et al., 2008). Thornicroft (2008: p 119) quotes a patient who shared her experience with MHCP as her worse nightmare.

“In my experience it has been mostly health professionals who have been at fault when it comes to treating me with respect and dignity. My experience includes the following incident, talking to me in a derogatory manner as if I was a child or wouldn’t understand. Not fully explaining to me what’s going on with my treatment, apparently fearing that I would not be able to cope with the truth. After taking an overdose overhearing comments of the nurses in accident and
emergency “it’s your own fault that you are here, and don’t think that we have better things to do, treating people with real problems”. People with mental illness are seen as being manipulative, annoying and attention seeking (Thornicroft, Rose and Kassam, 2007).

Similar studies conducted in western Nigeria among doctors revealed high levels of stigmatizing attitudes as they perceived people with SMI as unpredictable, lacking self-control and being aggressive. Only 9% of the doctors indicated that they believed that people with mental illness could recover (Adewuya & Oguntade, 2007).

Nurses, like the general population, tend to be less stigmatizing when they know someone or have a family member with mental illness (Thornicroft et al., 2008). A survey was conducted in South Australia which compared attitudes of over 250 mental health care practitioners (MHCPs) and the general public about the likely outcomes of mental illnesses, especially schizophrenia and depression, and findings revealed that the professionals were more optimistic about the chances of recovery then the general public (Thornicroft et al., 2008).

2.7 Ways to mitigate and reduce stigma

Researchers have suggested three areas of involvement that could help to reduce stigma; protest, education, and contact (Corrigan et al., 2005; Overton & Medina, 2008; Thornicroft et al., 2007). Protest is defined as an objection or a complaint (Merriam Webster Dictionary, 1990, p. 418, in Overton & Medina, 2008). Protestation addresses negative representations of mental illness used by the public or media (Thornicroft et al., 2007).

2.7.1 The effect of education and contact

Education and contact are the other methods to mitigate stigma (Overton & Medina, 2008). Family members and persons with mental illness in the US have formed a group known as the National Alliance of the Mentally Ill, which has been educating the community members at large in order to reduce stigmatizing attitudes (Corrigan et al., 2005; Rusch et al., 2005; Corrigan & Shapiro, 2010). In Germany, there are various stigma campaigns, one of which is BASTA (meaning stop in Italian and German) the alliance for mentally ill people which is active in various fields, including extensive programmes in schools, education of media and exhibition of art by people with mental illness (Corrigan et al., 2005; Rusch et al., 2005; Corrigan & Shapiro, 2010). Another German initiative is a school project called “Crazy? So
what” which raises students’ awareness of mental health to improve the lives of people living with SMI (Corrigan et al., 2005; Rusch et al., 2005; Corrigan and Shapiro, 2011). The World Psychiatric Association (WPA) started an international programme, to try and promote awareness and knowledge about schizophrenia and treatment options to eliminate discrimination and prejudice related to schizophrenia (Corrigan et al., 2005; Rusch et al., 2005; Corrigan and Shapiro, 2010).

In South Africa, the Department of Health, assisted by various NGOs, including the South African Depression and Anxiety Group (SADAG) and the Health Information Centre, has coordinated initiatives to erase stigma by promoting public awareness and educational campaigns (Kakuma et al., 2010). The Central Gauteng Mental Health Society (CGMHS) in South Africa launched a Consumer Advocacy Movement in 2005, which aimed at empowering people living with mental illness to ensure that their rights are not violated (Kakuma et al., 2010). These campaigns are done through the media, school health, distribution of pamphlets and the hosting of awareness workshops, where people living with mental illness are equipped with skills to communicate their problems (Kakuma et al., 2010). Among the issues that were discussed at the World Mental Health Convention held in South Africa in November 2007 were that new policies and laws be developed to secure the rights of mental health users and laws that promote discrimination be abolished (Health Policy and planning, 2009).

Contact between members of different groups can lead to reduced prejudice and increased acceptance because it reduces uncertainty, threat and intergroup anxiety (Anagnostopoulos & Hantzi, 2011). Professional contact and personal contact with a person who has a mental illness have been linked to reduced stigma. Researchers have found that having a friend or a family member with mental illness has been linked to a reduced stigmatizing attitude (Alexander & Link, 2003, Corrigan, 2007; Rusch et al., 2010; Anagnostopoulos & Hantzi, 2011). Different studies have documented that people living with mental illness are perceived less dangerous by people who work or volunteer at mental health facilities (Corrigan et al., 2005; Rusch et al., 2010; Anagnostopoulos & Hantzi, 2011). In a sample of American students, participants who were familiar with mental illness were less likely to be socially distant from these individuals as compared to the general population that also participated (Anagnostopoulos & Hantzi, 2011).
Contact with a person with mental illness is a most important strategy to change stereotypical beliefs regarding mental illness and may help to decrease mental health stigma (Corrigan et al., 2005; Rusch et al., 2005; Thornicroft et al., 2007). Contact seems to change stigmatizing knowledge structures and research on stigma has shown that contact with people with mental illness leads to significant change in stereotypical beliefs about mental illness (Corrigan, Edwards, Green, Diwan, & Penn, 2001; Corrigan, 2007). After contact, a person’s stereotypical beliefs about the minority group may be replaced by a more positive image of that group. For instance, working with a person who has a mental illness may change one’s stereotypical beliefs about this person being dangerous, incompetent and dependent on others (Rusch et al., 2005). Another example is working with a woman who is mentally ill, but also highly attractive, and successful in her professional and personal life can change the attitude of the stigmatizing group and the way they think about this woman. They may classify her as belonging to ‘us’ instead of ‘them’ (Rusch et al., 2005).

In addition, exposure to recovered patients in the community psychiatric setting is also suggested to decrease stigmatizing attitudes (Fernando, Deane & McLeod, 2010). Recent research has discovered that contact with a person with mental illness has a positive effect as it is believed to decrease negative attitudes (Corrigan et al., 2005; Corrigan & Shapiro, 2010). People who have knowledge and experience about mental illness are less likely to endorse the stereotypes of dangerousness (Corrigan et al., 2001; Angermeyer et al., 2003; Corrigan, 2004; Corrigan et al., 2005). Interaction of participants in stigma change campaigns with mentally ill people has shown great improvement in their attitudes towards mental illness and their beliefs about the causes of mental illnesses (Corrigan et al., 2005; Corrigan & Shapiro, 2010). Stigma is reduced by providing an opportunity for interpersonal contact between people who have mental illness and the stigmatizing group (Patten, Remillard, Phillips, Modgill, Szetto & Kassam, 2012). This is confirmed by a study that was conducted in three pharmaceutical faculties in Canada among pharmacy students. The purpose of this study was to evaluate the impact of contact based education on pharmacy students’ attitudes towards people with mental illness (Patten et al., 2012). Stigma was assessed at three time points: prior to students receiving the intervention, when the early group had attended the session and the late groups had not, and after both groups had received the intervention. The study showed that contact based mental health courses reduced mental health-related stigma among pharmacy students (Patten et al., 2012). The effect size associated with the first contact based education session was 0.45. This size indicates that 68% of pharmacy students that participated in the education
session had a greater improvement in their OMS-HC scores. The findings also showed that 78% of those who received education intervention had a greater change in their OMS-HC scores as compared to the average score change in the other group (Patten et al., 2012).

2.7.2 The effects of clinical contact

Research shows that education and contact during both undergraduate training, e.g. student nurses training and in an experimental situation can promote positive attitudes towards people living with SMI (Corrigan et al., 2005; Rusch et al., 2005; Corrigan & Shapiro, 2010; Thornicroft et al., 2007). It is suggested that students should be allocated either at a mental health facility or in other less formal settings where they have an opportunity for early contact with MHCUs (Corrigan et al., 2005; Fernando & Deane, 2010). It is suggested that nurses and psychologists exposure to a psychiatric setting and contact with people with SMI during their training is associated with positive attitudes toward their clients (Chambers, Guise, Valimaki, Botelho, Scott & Staniuliene, 2010).

Research suggest that because health care professionals only interact with their clients when they are very ill and are less likely to interact with them once they have recovered, this can affect their picture of individuals with mental illness (Corrigan, 2007). Student nurses on training need to encounter people in recovery so that they can learn early that psychopathology is only one side of the illness and recovery is the other (Corrigan et al., 2005; Corrigan, 2007).

Studies conducted in European countries among registered nurses indicated that qualified staff and those with specialized courses in mental health care hold more positive attitudes than those without any psychiatric training (Chambers et al., 2010; Mavundla & Uys, 1997). The results of the study by Markstrom et al. (2009) support this and suggest that student nurses in Sweden reported increased positive attitudes towards mental illness after clinical placement. The aim of the study was to examine the changes in attitudes towards mental illness after education and clinical placement of different health care students (Markstrom et al., 2009). Different questionnaires were used to measure levels of familiarity with mental illness and attitudes towards mental illness in general, prior to the combination of theory and clinical placement. A Swedish version of the attitudes to person with mental illness questionnaire was used. The questionnaire explored attitudes towards seven different mental disorders: severe depression, panic attacks, schizophrenia, dementia, eating disorders, alcohol
addiction and drug addiction. A five point scale was used where the end points are given, for example 1=dangerous to others and 5=not dangerous to others (Corrigan et al., 2005; Markstrom et al., 2009). The findings showed that the subgroup of student nurses (n=107) had changed their attitudes in a non-stigmatizing direction, the occupational therapy students (n=33) had less stigmatizing attitudes and the medical students (n=25) had changed stigmatizing attitudes concerning fear. Furthermore, the findings showed that attitudes towards specific illnesses had changed as follows: student nurses changed their attitudes towards people with schizophrenia after clinical placement, the occupational therapy students developed more positive attitudes with respect to the recovery of people with schizophrenia (p=0.0012) and people with drug addiction and alcohol addiction were seen as less dangerous (p=0.008), (Markstrom et al., 2009).

Corrigan et al., (2005) suggest that contact with a person who suffers from mental illness can reduce stereotypical attitudes. However, Bobo, Nevin, Greene and Lacy (2009) found that third year rotation does not seem to have any impact on choosing psychiatry as an area of specialty among medical students. Research carried among medical students suggests that contact with someone with mental illness reduces stigmatizing attitudes (Ay, Save, & Fidanoglu, 2006). The medical students in their final year of training displayed less stigmatizing attitudes towards patients with schizophrenia, as they perceive patients as less dangerous and had positive attitude about treatment of schizophrenia and a belief that it is curable (Ay, et al., 2006).

Similarities were found in Greece where a research study was conducted in a University Sector in Eastern Greece (Arvaniti, Samakouri, Kalamara, Bochtsou, Bikos & Livaditis, 2009). The aim of the study was to explore attitudes of health care professionals towards people living with mental illness (Arvaniti et al., 2009). These researchers reported that 17, 5% percent of participants stated that they had never had any contact with mental illness except through television. Among the participants, 14,4% of the doctors and 24% of the nurses displayed social discrimination by stating that patients who had previously been hospitalized should not get married, inpatients with mental illness should not be allowed to vote and women, whose husbands had been hospitalized for SMI, should be allowed by law to divorce their husbands. Sixth year medical students were found to be less discriminating, as compared to other students, which could be simply because they have completed their course in psychiatry. Nurses were the minority group among other participants and they
displayed least favorable attitudes towards mentally ill patients, which could be due to inadequate training in mental health issues (Arvaniti et al., 2009).

2.8 Summary

The chapter summarizes the impact of stigma on people living with SMI and recommendations of various researchers. The next chapter will discuss the methodology of this study.
CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section describes how the research was conducted. The research design, sample frame, size and sampling technique, data collection technique and instruments will be described and motivated. This study also addresses the ethical issues in the study.

3.2 Paradigm and research design

A quantitative approach was used to explore and describe the psychiatric nursing students’ stereotypical beliefs associated with mental illness labels. This approach is based on a positivist paradigm and has a quantitative non-experimental survey design. The study makes use of a self-report questionnaire to obtain repeated measures, before and after information (educational block) and contact with mental health users (MHCUs) during clinical placement.

3.3 Setting and target population

The population included all nursing students currently completing the psychiatric nursing component of the four year diploma (R425). The target population was student nurses who were registered to complete the four year diploma with KwaZulu-Natal College of Nursing (KZN)CN). The KZN has its office in Pietermaritzburg and there are 12 campuses and 14 sub-campuses over 6 districts (kznhealth.gov.za/kzncollegenursing.htm). The KZN management at the head office is divided into north and south to facilitate coverage over the six districts. The north consists of 4 campuses and 13 sub-campuses and the south includes 6 campuses and one sub-campus. Each campus has its own managerial structure, campus principal and subject heads. Although the target population is the nursing students enrolled for the four year diploma (R425), other programmes offered within the campuses include post basic diploma courses for professional nurses in different disciplines, such as pediatrics; a two year course leading to enrolment as an enrolled nurse (R1275); and a two year bridging course leading to a professional nurse registration.

As mentioned in chapter one, all campuses work from a standardized curriculum, registered with the SANC, whose content and implementation schedule does not differ between campuses (KZNCN, 2012). The psychiatric component of the four year programme (R425) is a six (6) month module and begins in either January or July. Each campus begins the
psychiatric nursing module with an academic block followed by clinical placement before the student returns to campus for a second academic block and then a second clinical placement (KZNCN, 2012). In all campuses, students are expected to cover a total number of 720 hours in the clinical setting. Of these 720 hours, a minimum of 120 hours (three weeks) is specific to placement in a long term psychiatric unit and a minimum of 200 hours (five weeks) specific to placement in a psychiatric community clinic. However, the clinical placement schedule can differ between campuses. For example, one campus may place students in long term clinical facilities after the first block, while another places their students in community psychiatric clinics. This difference is related to clinical placement availability and not philosophical differences between campuses.

### 3.4 Sample and sampling procedure

Purposive sampling was used to select the campuses for reasons of accessibility, travel and existing established relationships with the researcher (Polit and Beck, 2008:339). As illustrated in table 3 below, four campuses within the south managerial structure were selected with a potential participant sample of one hundred and thirty two (n=132).

**Table 3.1: Sample from KZNCN campuses**

<table>
<thead>
<tr>
<th>Name of campus</th>
<th>Geographical area</th>
<th>Potential participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus A</td>
<td>Durban Central</td>
<td>34 student nurses</td>
</tr>
<tr>
<td>Campus B</td>
<td>Pietermaritzburg</td>
<td>35 student nurses</td>
</tr>
<tr>
<td>Campus C</td>
<td>Pietermaritzburg</td>
<td>35 student nurses</td>
</tr>
<tr>
<td>Campus D</td>
<td>Chatsworth</td>
<td>28 student nurses</td>
</tr>
</tbody>
</table>

The researcher believes that the diversity within individual campuses is a representative sample as each campus consists of students with different characteristics in terms of gender, and racial groups. All students nurses entered for the psychiatric nursing component within the selected campuses were invited to participate. Although each campus admits 30 students per intake, due to attrition the potential participants totaled one hundred and thirty two (n=132), (KZNCN, 2012). Polit and Beck (2008) suggest that this is a sufficient number of participants to have statistical power.
The inclusion criteria for participants were:

- They were enrolled for the psychiatric component of the four year nursing course (R425) with Natal College of Nursing
- They were available at the data collection site on the days of data collection
- They agreed to participate in the study.

Data was collected at three points in time from the same sample to facilitate research objectives and questions.

3.5 Data collection instrument

The data collection instrument was compiled into one self-report questionnaire that elicited information on participants’ demographic data and also included a semantic differential measure (SDM). The questionnaire was presented in English only, as the teaching medium at each of the campuses is English and it was assumed that the students’ comprehension of English would be adequate.

3.5.1 Demographic data

The demographic data required included age, gender and cultural group. These were included because it has been suggested that, in terms of gender, females are less likely to have stereotypical beliefs regarding dangerousness than males. With respect to culture, many South Africans belong to traditional religions, which influence the way they perceive mental illness, irrespective of age (Botha et al., 2006).

3.5.2 The Semantic Differential Measure (SDM)

The Semantic Differential Measure (SDM) designed by Smith (2010) has been adapted for use in this study (Annexure B, p, 28). The SDM is a measurement technique rather than a measurement tool that provides a direct measurement of stereotypical beliefs (Link et al., 2004). It was developed by Osgood and colleagues in 1957 to measure the psychological meaning concepts have for people and was later applied to public conceptions of people with mental illness (Smith, 2010). The SDM provides participants with target labels, for example schizophrenic, and asks them to associate these with specific characteristics, such as dangerousness, on a 5 point scale. Each scale is bound by a set of polar adjectives such as “very dangerous” through to “not dangerous at all” (Link et al., 2004; Smith 2010).
Participants are also asked to rate the label of “average person” to provide a point of comparison for participants’ evaluations of the target labels (Link et al., 2004; Smith, 2010).

Smith (2010) evaluated four psychiatric labels; schizophrenia, bipolar mood disorder, major depression and previously admitted to a psychiatric hospital. The last label has been removed as it is likely that all MHCUs that students come into contact with will have been admitted to a psychiatric hospital at some stage. Six characteristics, or stigmatizing attitudes, related to stereotyping were identified within the current literature. These included dangerousness, unpredictability, incompetence, impaired communication, responsibility for illness, and non-response to treatment (Adewuya & Oguntade, 2007; Adewuya & Makanjuola, 2008; Corrigan, Wassel, Michaels, Olschewski & Wilkniss, 2009; Fernando et al., 2010; Putman, 2008; Smith, 2010). People with schizophrenia are generally perceived as more dangerous than those suffering from other mental illnesses (Angermeyer, Matschinger & Corrigan, 2004).

3.5.3 Validity and reliability of the SDM

The content validity of the SDM was established from current literature and expert opinion, as listed in table 3.2 below. Smith (2010) established stability of the SDM by a test-retest, the reliability coefficient and Cronbach’s alpha (α = 0.872). The SDM used in this study was tested for stability by completing a test-retest and a calculation of a reliability coefficient.

Table 3.2: Content validity of the Semantic Differential Measure

<table>
<thead>
<tr>
<th>Stereotypes</th>
<th>SDM</th>
<th>Current studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompetent</td>
<td>2</td>
<td>Adewuya &amp; Makanjuola, 2008, Rusch et al., 2010; Smith, 2010.</td>
</tr>
<tr>
<td>Hard to talk to</td>
<td>3</td>
<td>Adewuya &amp; Makanjuola, 2008, Fernando et al., 2010, Putman, 2008; Smith, 2010.</td>
</tr>
<tr>
<td>Responsible for his/her illness.</td>
<td>5</td>
<td>Fernando et al., 2010, Rusch, et al., 2009, Putman, 2008, Adewuya &amp; Makanjuola, 2008; Smith, 2010</td>
</tr>
</tbody>
</table>
3.6 Data collection process

Approval from the University of KwaZulu-Natal Ethics Committee had been obtained before starting data collection. Once ethical approval had been received from the UKZN Ethics Committee, the researcher gained written permission from the principal of KwaZulu-Natal College of Nursing (Annexure C) and then from the principals of the four campuses where data was collected (Annexure C). Dates for data collection were negotiated with the principals of each campus, the aim being to collect data at the same point in time at each campus. The researcher communicated with lecturers from all four campuses telephonically, to assist her to collect data from students. Lecturers from three of the four campuses took on the role of research assistant and an information letter was sent to each of them. They agreed to read the information, distribute the consent sheet to potential participants, ensure students had their student numbers and ensure that they were clear on how to complete the questionnaire. In addition, these lecturers (research assistants) remained in the room until the questionnaires had been posted in the box provided and kept the data stored safely until it was collected by the researcher. The researcher facilitated data collection at the fourth campus.

The questionnaire was issued at three points in time to facilitate the research objectives and questions. The first phase of data collection was done on the 7th January 2013, during the first period of the first day of the student nurses’ psychiatric block. In essence, the students had no academic or clinical input related to psychiatry, specifically psychiatric nursing. The second phase of data collection occurred on 30th January 2013, during the last lecture of the last day of the students’ psychiatric nursing block. The students had therefore been exposed to academic input related to psychiatric nursing during this block, the content of which included: attitudes and values (brief history, positive attitudes and current theoretical models); psychiatric nursing skills, including counseling process and crisis intervention; comprehensive care; psychiatric disorders and conditions including definition; causative factors, signs and symptoms, nursing process and disease process; and anxiety disorders, psychotic disorders, organic mental disorders and behavioral problems. The third and final phase of data collection occurred on 15th May, 2013, during the first lecture on the first day, of the students’ second psychiatric nursing block. This phase of data collection occurred after students’ clinical placement in specialist psychiatric facilities. Clinical placement included a total number of 720 hours in the clinical setting. Of these 720 hours, a minimum of 120 hours (three weeks) is specific to placement in a long term psychiatric unit and a minimum of 200 hours (five weeks) specific to placement in a psychiatric community clinic.
The researcher and the three lecturers (research assistants) had a meeting with the students before data collection to explain the purpose of the study and their rights as participants. The content of this presentation was from the information and consent sheet provided to each student (Annexure A). Students were given time to ask questions. The participants were assured that confidentiality and anonymity would be maintained. Although student numbers were used to cross reference the repeated measures, these were changed to codes and no students’ names were ever recorded. In addition, no written consent was required as participants’ completion of the questionnaire signified implied consent. Students were instructed that if they did not wish to participate, they need not complete the questionnaire. Motivation for the use of implied rather than written consent can be found under ethical considerations (p.75). There was a box provided to place questionnaires after completion to ensure confidentiality. Completion of questionnaire took about 30 to 45 minutes.

3.7 Ethical considerations

Ethical approval was obtained from UKZN’s Research Ethics Committee and from the principal of KZNCP. In addition, permission was obtained from the principals of participating campuses (Annexure C).

**Informed Consent:** The researcher and research assistants explained the purpose of the study to the participants. An information and consent sheet was provided to all participants (Annexure A). It was emphasized that participants need not participate and that they could post a blank questionnaire in the box provided to signify their refusal to participate.

**Anonymity and Confidentiality:** Anonymity and confidentiality was ensured by not using the participants’ names. Student numbers were used to allow for cross referencing of the repeated measure and the results were then coded. The names of the academic institutions where data has been collected will not be mentioned in any publication that may arise from this research. In addition, implied consent rather than signed consent facilitates anonymity. Implied consent is defined as “Consent to participate in a study that a researcher assumes has been given based on certain actions of the participant, such as returning a completed questionnaire” (Polit & Beck, 2006, p. 501). This is useful in situations where self-report questionnaires are used to collect data and the researcher wants to assure participants of anonymity and attempt to reduce responses that may represent social desirability bias (Polit & Beck, 2006, p. 300). The participants dropped their completed questionnaires in a box that
was provided to ensure anonymity. The researcher will achieve confidentiality by ensuring that only the researcher and the supervisor will have access to raw data during data analysis.

**Voluntary participation:** Participation was voluntary and the participants were assured that they had the right to not complete the questionnaire, in this way stating their unwillingness to participate. In addition, participants were informed that they may withdraw from participating at time during data collection without prejudice (Annexure A).

**The risk** to participants was considered to be minimal. No names are associated with answers and participant responses cannot be linked to them as individuals and thus have no negative consequences. The researcher has no investment in specific responses. In addition, participants were assured that whether they participated or not would have no adverse consequences for them as individuals or a group.

**Data management:** Data will be stored in accordance with the UKZN policy. Raw data was be locked in a cupboard by the research assistants until collected by the researcher on the same day as data collection and the raw data could subsequently be accessed by the researcher and the supervisor only. Electronic information was kept in the researcher’s own computer, which is protected by a password known by the researcher only. Data will be stored at the UKZN School of Nursing for five years after completion of the study and after the final report has been issued. It will be disposed of according to the University policy.

**3.8 Data analysis**

Data was cleaned and organized using Statistical Package for Social Science (SPSS) version 21. Analysis included descriptive statistics, which allows the researcher to organize the data in ways that give meaning and insight and that examine a phenomenon from a variety of angles (Burns & Grove, 2008). Frequency distributions were used to organize data. Measures of central tendency (mode, median and mean) were also used to describe data.

**3.9 Summary**

This chapter outlined the methodology, research design, data collection process and ethical considerations. The next chapter will present the research findings.
CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the results of the study. The aim of the study was to explore and describe stereotypical beliefs associated with mental illness among psychiatric nursing students and to describe possible mediating effects of information and contact on stereotypical beliefs. Data was entered into statistical analysis package (SPSS) version 21 using a code book.

This chapter is structured as follows: firstly, it presents a description of the sample with respect to the demographic variables. Secondly, presentation of the data from the semantic differential measure is presented per stereotypical construct (dangerousness, unpredictability, dependency, communication ability, responsibility for illness, and potential for recovery) for the three diagnostic labels (schizophrenia, bipolar mood disorder and major depressive disorder) and includes data for each of the three phases of data collection. As described in Chapter three (point 3.6, page 34), all three phases of data collection used the same data collection instrument. Phase one data represents participating students beliefs related to specific stereotypical constructs for the three psychiatric labels upon entry into the psychiatric nursing program. Phase two data, collected after academic input (information), represents the potential mediating effect of information. Phase three data, collected after clinical placement in specialist psychiatric settings (contact), represents the potential mediating effect of contact on participating students’ stereotypical beliefs.

4.2 Description of the sample and its representativeness

Data was collected from students enrolled for the psychiatric nursing component of the four year nursing course (R425) at four campuses of a provincial nursing college. Although data was collected at three points in time during students’ engagement within the psychiatric nursing component, the number of participating students remained the same throughout. No participants left or joined the participating student groups, and no students who participated in the first data collection phase declined to participate in the second and third. Thus the description of the sample provided below relates all three phases of data collection. The final sample included one hundred and thirty two (n=132) student nurses
Table 4.1 below represents the distribution of participants’ ages. The largest (n=95, 72%) participant group, 21-30 years, is representative of the fourth year nursing students.

**Table 4.1: Age distribution of participants**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>2</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>21-30</td>
<td>95</td>
<td>72.0</td>
<td>72.0</td>
<td>73.5</td>
</tr>
<tr>
<td>Valid</td>
<td>32</td>
<td>24.2</td>
<td>24.2</td>
<td>97.7</td>
</tr>
<tr>
<td>41-50</td>
<td>3</td>
<td>2.3</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The students typically enter the diploma nursing program aged between 18-20 years old. Most of the participants (n=95, 72%) fell into the 21-30 year old group, which is representative of the fourth year nursing students. Other participant age groups included; 18–20 years (n=2, 1.5%); 31-40 years (n=32, 24.2%); and 41-50 years (n=3, 2.3%).

In keeping with the norm within diploma nursing programs, the majority of participants (n=104, 78%) were female, as represented in figure 3 below. Males participants totalled only 21.2 % (n=28).

![Figure 4.1: Gender distribution of participants](image)

The study participants fell into three cultural groups: black (African): Indian: and coloured. There were no white students among the fourth year students in all campuses where data was collected. It is suggested that participants are representative of the larger student nurse population within this specific college of nursing. The majority of the sample (n=99, 75%), as illustrated in Table 4.2 were black (African); followed by Indian (n=24, 18.2%) and then coloured (n= 9, 6.8%).
The total number of students in the four year course per campus as at January 2013 =261 students. The provincial college has designed the following student intake plan for the four year undergraduate nursing; campus A, 50 students per group; campus B 40, students; campus C, 40 students; campus D 25, students per each intake. The distribution of gender and cultural group across the four campuses at the time of data collection was; African males=59; African females n=164; Indian males n=7; Indian females n=16; coloured males n=2; coloured females n=13; white females=0.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>99</td>
<td>75.0</td>
<td>75.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Coloured</td>
<td>9</td>
<td>6.8</td>
<td>6.8</td>
<td>81.8</td>
</tr>
<tr>
<td>Indian</td>
<td>24</td>
<td>18.2</td>
<td>18.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

4.3 Semantic Differential Measure and the extent of negative stereotypes

As presented in chapter 3 (point 3.5.2 page 18), the Semantic Differential Measure (SDM) that was used was adapted from the instrument used by Smith and Middleton (2010). The adaptation involved removing two labels: ‘average person’ and ‘a person with a history of admission to a psychiatric hospital’ The measure used in this study therefore provided participants with three target labels - schizophrenia, bipolar mood disorder and major depressive disorder - and asked participants to associate these labels with specific characteristics; dangerousness, unpredictability, incompetence, impaired communication, responsible for illness and ability to recover from illness (Smith, 2010). This SDM measure makes use of a five point scale, 1-5 bound by polar objectives such as “very dangerous” and “not dangerous at all” (Smith, 2010).

In the analysis process, diagnostic labels were used as codes (schizophrenia, bipolar mood disorder and major depressive disorder). Stereotypical constructs of interest were coded to facilitate data analysis (dangerousness=danger; unpredictability=unpredictable; independent=dependent; communication=not easy to talk to; responsibility= contributes to ill health; and recovery=never recover from illness). In addition, the three phases of data collection were identified as phase 1, phase 2 and phase 3 to facilitate data analysis,
specifically comparisons between results of the three phases. For all three data phases, descriptive statistics included; frequencies, measures of central tendency and distribution (median, mode, range, percentiles, skewness, and histogram with normal distribution curve). Histograms are included as annexure F to prevent the chapter becoming too bulky. In addition, scores obtained on the SDM were computed. The SDM yielded four scores; a total possible score for each psychiatric label (schizophrenia, bipolar mood disorder and major depressive disorder) out of 30, and a total possible score on the SDM of 90. Higher scores suggested greater negative stereotypes.

4.3.1 Perceptions of dangerousness

**Phase one**: As illustrated in table 4.3 below, participants perceived persons with schizophrenia as the most dangerous (me=4; mo=4; 25th percentile=3, 75th percentile=5) compared to the other two labels, bipolar mood disorder (me=3; mo=2; 25th percentile=2, 75th percentile=4) and major depressive disorder (me=3; mo=5; 25th percentile=2, 75th percentile=5). Although the most commonly occurring score for major depressive disorder (mo=5) is higher than the most commonly occurring score for schizophrenia (mo=4), the distribution at the 25th percentile (schizophrenia=3, major depressive disorder=2) and the distribution at the 50th percentile (schizophrenia=4; major depressive disorder=3) suggests greater perceptions of dangerousness associated with schizophrenia than major depressive disorder.

<table>
<thead>
<tr>
<th>Table 4.3: Phase one - Perceptions of dangerousness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bipolar disorder label</strong></td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>N Valid</td>
</tr>
<tr>
<td>Missing</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>Skewness</td>
</tr>
<tr>
<td>Std. error of skewness</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>50 Percentiles</td>
</tr>
<tr>
<td>75</td>
</tr>
</tbody>
</table>

**Phase two** data suggests a change in the perceptions of dangerousness reported in phase one. As illustrated in table 4.4 below, participants scores are less at the 75th percentile for all the diagnostic labels (bipolar mood disorder=3; schizophrenia=4.75; major depressive disorder=4) compared to scores in phase one. This reduction is more prominent for the major
depressive disorder label than the schizophrenic label. The mode (mo=2) decreased, and skewness statistic associated with major depression moved from negative (-.147) to positive (.063).

Table 4.4: Phase two - Perceptions of dangerousness

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Skewness</td>
<td>.126</td>
<td>-.399</td>
<td>.063</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.221</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Percentiles</td>
<td>25</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>3.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Of interest is the increase in perceptions of dangerousness associated with bipolar mood disorder label (mo=3) and a decrease in the skewness (.126) suggesting a more even distribution in scores rather than a greater clustering around the lower score (positive skew). Information (curriculum content) students received during the block is suggested to have increased their perceptions of dangerousness related to bipolar mood disorder label and reduced perceptions of dangerousness related to the major depressive disorder label (mo=2 compared to mo=5) and only a slight change in responses to the schizophrenia label.

Phase three data suggests little change from phase two data. As illustrated in table 4.5 (p, 43) participants’ stereotypical beliefs related to bipolar mood disorder appeared to remain the same even after contact with a person with the label (me=3, mo=3). The distribution remained the same as in phase two (25th percentile=2, 75th percentile=3). However, the clustering of scores around the lower values increased (the skewness statistic) from .126 in phase 2 to .217 in phase 3, but not to the extent of the phase one results (skewness statistic .317). This suggests that perceptions of dangerousness were low in phase one, increased in phase two (after receiving information) and had a slight decrease in phase three (after contact). The mode reflects an slight increase in the score on the major depressive disorder label changing from 2 to 3, indicating that contact with a person with major depressive disorder during clinical placement seem to have increased perceptions of dangerousness related to major depressive disorder label, but not to the extent of the phase one data.
Table 4.5: Phase three - Perceptions of danger

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Mode</td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Skewness</td>
<td></td>
<td>.217</td>
<td>-236</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td></td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Percentiles 50</td>
<td></td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Percentiles 75</td>
<td></td>
<td>3.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

The only label that seems to have experienced a consistent, although slight, reduction in perceptions of dangerousness is the schizophrenia label, evidenced by a consistent reduction in score confirmed by skewness statistic and measures of central tendency.

4.3.2 Perceptions of unpredictability

Phase one: As illustrated in table 4.6 below, participants perceived persons with schizophrenia as the most unpredictable (me=4; mo=4; 25\textsuperscript{th} percentile=3; 75\textsuperscript{th} percentile=5) compared to the other two labels, bipolar mood disorder (me=3; mo=3; 25\textsuperscript{th} percentile=2; 75\textsuperscript{th} percentile=4) and major depressive disorder (me=3; mo=3; 25\textsuperscript{th} percentile=2; 75\textsuperscript{th} percentile=4). This is confirmed by frequency distributions and the skewness statistics. All labels revealed a negative skew to the right, suggesting a greater number of participants clustering around the negative polar adjectives.

Table 4.6 Phase one - Perceptions of unpredictability

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Mode</td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Skewness</td>
<td></td>
<td>-.057</td>
<td>-.743</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td></td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Percentiles 50</td>
<td></td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Percentiles 75</td>
<td></td>
<td>4.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

The data showed a negative skew, with participant scores clustering more around lower values. Schizophrenia had the highest skewness statistic (-743) being more than three times
the size of the std, error of skewness (211). Major depressive disorder reported a skewness statistic of -173, which was higher than the skewness statistic for bipolar mood disorder (-057), indicating more negative stereotypes related to the person with major depressive disorder than a person with bipolar mood disorder. The histogram representation confirms the negative skew for schizophrenia (Annexure F)

**Phase two** data suggest a reduction in stereotypical beliefs reported in phase one. As illustrated in table 4.7, participants scores on the schizophrenia label are less at the 25th percentile=2 and at the 75th percentile=4, indicating that the content received by participants during the teaching block seemed to have decreased perceptions of unpredictability related to the schizophrenia label. A slight reduction on the bipolar mood disorder label was also noted (mo=2 with a multiple mode a; 25th percentile=2; 75th percentile=4). The skewness statistics associated with bipolar mood disorder moved from negative (-057) to positive (.057). These results suggest that the content the participants received during their block slightly decreased their perceptions of unpredictability associated with bipolar mood disorder. Major depressive disorder remained the same as in phase one (me=3; mo=3; 25th percentile=3; 75th percentile=4).

**Table 4.7 Phase two - Perceptions of unpredictability**

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid 132</td>
<td>132</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Missing 0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2a</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Skewness</td>
<td>.057</td>
<td>-.303</td>
<td>-.072</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.212</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Percentiles</td>
<td>50</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

The skewness statistics decreased (-072), suggesting slightly less clustering around the negative polar adjectives. The results suggest that although content given to the participants during their block seem to have reduced participants perceptions of unpredictability
associated with schizophrenia, this label is still seen as more unpredictable than bipolar mood disorder and major depressive disorder.

**Phase three** data suggests a reduction in stereotypical beliefs reported in phase two. As illustrated in table 4.8 below, participants’ scores suggest a slight reduction in perceptions of unpredictability related to the schizophrenia label (me=3; mo=3). A slight reduction in skewness statistics on schizophrenia was also noted (-207 (-743 reported in phase one and -303 in phase two), suggesting that perceptions of unpredictability were high in phase one, slightly deceased in phase two (after information) and further decreased in phase three (after contact). Although schizophrenia still remained associated with perceptions of unpredictability, the results suggest that contact with a person with schizophrenia label slightly decreased perceptions of unpredictability. However schizophrenia continued to have the higher distribution at the 25th percentile (3) than the other two labels indicating that the schizophrenia label was seen as more unpredictable than bipolar mood disorder and major depressive disorder. Contact with a person with major depressive disorder did not change perceptions of unpredictability.

**Table 4.8 Phase three - Perceptions of unpredictability**

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Major depressive disorder</th>
<th>Schizophrenia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>N</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Skewness</td>
<td>.015</td>
<td>-.186</td>
<td>-.207</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Percentiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>2.00</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td>50</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>75</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Participants had the same results on major depressive disorder as reported in phase two (me=3; mo=3; 25th percentile=2; 75th percentile=4), but a slight increase was noted on the skewness statistics (-186). An increase in mode scores reflected on bipolar mood disorder (mo=3), the distribution remained the same even after contact (25th percentile=2; and 75th
percentile=4) and slight decreased skewness statistics (.015) indicated increased perceptions of unpredictability associated with bipolar mood disorder than the scores reported in phase two (mo=2; skewness statistics (.057). The results suggest that participants contact with persons with schizophrenia in clinical placement seemed to slightly reduced perceptions of unpredictability associated with schizophrenia than reported in phase two. In addition participants contact seems to slightly increase the perceptions of unpredictability associated with bipolar mood disorder.

4.3.3 Perceptions of dependency

**Phase one:** As illustrated in table 4.9 below, participants perceived persons with schizophrenia as the most dependent (me=4; mo=5; 25th percentile=2; 75th percentile=5) compared to the other two labels, bipolar (me=2; mo=2; 25th percentile=1; 75th percentile=3) and major depressive disorder (me=3; mo=5; 25th percentile=2; 75th percentile=5).

<table>
<thead>
<tr>
<th></th>
<th>Bipolar disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Skewness</td>
<td>.753</td>
<td>-.390</td>
<td>-.084</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Percentiles 25</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Percentiles 50</td>
<td>2.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Percentiles 75</td>
<td>3.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Although both schizophrenia and major depressive disorder present with the same most commonly occurring score (mo=5) and both have the same distribution at the 25th (2) and 75th (5) percentiles, schizophrenia presents the highest median score (me=4). This suggests greater perceptions of dependency associated with a person with schizophrenia than a person with major depressive disorder. This is confirmed by the frequency distribution, the skewness statistic and the std. error of skewness. Results show a negative skew to the right suggesting a greater number of participants clustering around the negative polar adjectives for a person.
with schizophrenia and major depressive disorder. However there is a positive skew reported for bipolar mood disorder with the skew statistics (.753) to the left being more than the std. error of skewness (.211). Participants’ scores clustered around the lower values indicating less negative stereotypes related to the person being dependent. As illustrated in table 4.5, schizophrenia reported the (skewness -390) (std. error of skewness .211). Histogram representation confirms the negative skew for schizophrenia (annexure f) 

**Phase two** data suggest a reduction in stereotypical beliefs. Results are displayed in table 4.10. The findings reflect a decrease at the 75th percentile (4) on both schizophrenia and major depressive disorder. Participants’ scores illustrate an overall decrease in score on the schizophrenia label (me=3; mo=3; skewness statistics -126), suggesting less clustering around higher values. In addition, results reflect a decrease in the score on major depressive disorder (mo=3; skewness statistics -010).

Table 4.10: Phase two - Perceptions of dependency

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Skewness</td>
<td>.381</td>
<td>-.126</td>
<td>-.010</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25 Percentiles</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>50 Percentiles</td>
<td>2.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>75 Percentiles</td>
<td>3.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

These results suggest that the content the participants received during the block decreased perceptions of dependency associated with schizophrenia and major depressive disorder. An increase at the 25th percentile (2) is noted on the bipolar mood disorder label. The skewness statistics on bipolar mood disorder decreased (.381), compared to the skewness statistics reported in phase one (.753), which indicated less clustering around lower scores, suggesting that the content the participants received during their block increased perceptions of dependency associated with bipolar mood disorder.
**Phase three** results revealed a shift in participants’ stereotypical beliefs related to independence. In phase one, schizophrenia was the label most negatively perceived. However, as illustrated in table 4.11, a person with major depressive disorder was perceived as more dependent than the other two labels. Post contact scores increased (mo=4; skewness statistics -142) indicating that contact with a person with major depressive disorder in the clinical area increased perceptions of dependency. Schizophrenia distribution scores experienced a slight reduction in clustering around the higher scores (25th percentile=2; 75th percentile=4; skewness statistics -107) than reported in phase two. Bipolar mood disorder distribution of scores decreased further. Despite the same percentile scores as reported in phase two (25th percentile=2; 75th percentile=3) the skewness statistics (.434) indicate a greater clustering around the smaller scores, a slightly more positive skew than phase two data. The results suggest that contact with a person with bipolar mood disorder slightly decreased perceptions of dependency associated with this label reported in phase two.

**Table 4.11: Phase three - Perceptions of dependency**

<table>
<thead>
<tr>
<th></th>
<th>bipolar mood disorder</th>
<th>schizophrenia</th>
<th>major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>Valid: 132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td><strong>Missing</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>2.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>2</td>
<td>3a</td>
<td>4</td>
</tr>
<tr>
<td><strong>Skewness</strong></td>
<td>.434</td>
<td>-.107</td>
<td>-.142</td>
</tr>
<tr>
<td><strong>Std. Error of Skewness</strong></td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Percentiles</strong></td>
<td>25</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>3.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

4.3.4 Perceptions of communication

**Phase one:** Participant’s stereotypes related to ability to communicate revealed a shift from schizophrenia as the most negatively perceived label. As illustrated in table 4.12, persons with a major depressive disorder were perceived as the most difficult to talk to (me=4; mo=5; 25th percentile=2; 75th percentile=5) compared to the other two labels, bipolar mood disorder...
Although both schizophrenia and major depressive disorder had the same most commonly occurring score (mo=5) and the same distribution at the 75\textsuperscript{th} percentile (5), schizophrenia presents with the highest distribution at the 25\textsuperscript{th} percentile (3), while major depressive disorder presents with the highest median score (me=4). This suggests greater negative perceptions related to difficulty in communicating with a person with a major depressive disorder label than the schizophrenia label. This is confirmed by the skewness statistics and the std. error of skewness statistics. Major depressive disorder and schizophrenia revealed a negative skew to the right, suggesting a greater number of participants clustering around the negative polar adjectives. As illustrated in table 4.12, major depressive disorder reported the highest negative skewness statistic (-652), with participants clustering more around higher scores, being more than three times the size of the std. error of skewness (.211), followed by schizophrenia (-346) being more than the std. Error skewness (211). Bipolar mood disorder (skewness .152)

Table 4.12 Phase one - Perceptions of communication

<table>
<thead>
<tr>
<th>Phase</th>
<th>Bipolar disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
<td>3.50</td>
<td>4.00</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Skewness</td>
<td>.152</td>
<td>-.346</td>
<td>-.652</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Percentiles</td>
<td>25</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>3.00</td>
<td>3.50</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>3.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Phase two, outlined in table 4.13, and suggested a reduction in the stereotypical beliefs reported in phase one. Participants’ scores decreased at the 75\textsuperscript{th} percentile (4) on major depressive disorder. In addition, the mode reflects a decrease in scores on schizophrenia and major depressive disorder (mo=4), compared to the mode scores reported in phase one (mo=5). Participants’ scores on the schizophrenia label reflect a reduction in negative stereotypes associated with ability to communicate (25\textsuperscript{th} percentile=2; 75\textsuperscript{th} percentile=4;
skewness statistics -206) compared to phase one. The skewness statistics on the major depressive disorder decreased (-425) as compared to phase one (-652). Although there is some reduction on the skewness statistics, major depressive disorder remained the label most associated with perceptions of poor communication amongst the three labels. Participants scores did not reflect any change on bipolar mood disorder (me=3; mo=3; 25th percentile=2; 75th percentile=3 and skewness statistics .159). The results indicate that stereotypical beliefs related to difficulty in communications were reduced on schizophrenia and major depressive disorder labels after the content of the block than in phase one.

Table 4.13: Phase two - Perceptions of communication

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid 132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Skewness</td>
<td>.159</td>
<td>-.206</td>
<td>-.425</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Percentiles</td>
<td>25</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>3.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Phase three data indicates that contact produced a further reduction in stereotypical beliefs reported in phase two. Results suggest that perceptions of communication were very high in phase one in relation to major depressive disorder, reduced in phase two (after information) and reduced further in the third phase (after contact). There was reduction at the (25th percentile=2) reported on major depressive disorder, but distribution at the 75th percentile remained the same as in phase two (4). Median scores on schizophrenia reduced by one (me=3 from me=4), the mode remained the same as in phase two (mo=4).

However, when looking at all results for the schizophrenic label, 25th percentile=3 and with the same distribution at the 75th percentile=4, with a slight increase in; skewness statistics (-254), contact with a person with schizophrenia increased perceptions of poor communication related to this label. The skewness statistics decreased slightly on major depressive disorder (-233). The mode reflects a decrease in the score on bipolar mood
disorder (mo=2) and, in addition, an increase in the positive skewness statistics was noted (.251), indicating decreased perceptions of poor communication related to bipolar mood disorder as compared to phase one and two. In addition, there was an increase on the participants scores reported at the 75th percentile (4). Although major depressive disorder remained the label most associated with perceptions of poor communication, the slight reduction on participants’ scores indicates that contact with a person with major depressive disorder reduced perceptions of poor communication related to this label when compared to phases one and two.

Table 4.14: Phase three - Perceptions of communication

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td><strong>Valid</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Missing</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>3.00</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Skewness</strong></td>
<td>.251</td>
<td>-.254</td>
<td>-.233</td>
</tr>
<tr>
<td><strong>Std. error of skewness</strong></td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Percentiles</strong></td>
<td>25</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

4.3.5 Perceptions of Responsibility

**Phase one:** Once again, with respect to perceptions of responsibility for own illness, the schizophrenia label was associated greater negative stereotypical beliefs than the other labels.

Persons with schizophrenia were perceived as most responsible for causing own illness (me=4; mo=5; 25th percentile=2; 75th percentile=5), compared to the other two labels, major depressive disorder (me=3; mo=5; 25th percentile=2; 75th percentile=5) and bipolar mood disorder (me=2; mo=2; 25th percentile=2; 75th percentile=3). Although both schizophrenia and major depressive disorder present with the same most commonly occurring score (mo=5); and present with same highest distribution (75th percentile=5), schizophrenia presented with the highest median score (me=4), which suggest greater perceptions of responsibility for causing own illness.
This is confirmed by frequency distribution, the skewness statistics, and the std. error of skewness. Results show a negative skew, with a greater number of participant scores clustering around the negative polar adjective for both schizophrenia and major depressive disorder. However, there is a positive skew reported for the bipolar mood disorder label and the skewness statistic (.551) is more than twice the size of the std. error of skewness (.211), indicating that a person with bipolar mood disorder is not seen as responsible for causing own illness. As illustrated in table 4.15 below, schizophrenia reported a negative skewness (-.356) being more than the std. error of skewness (.211), followed by major depressive disorder (skewness-.315) being more than the std. error of skewness (.211). The histogram representation confirms the negative skew of schizophrenia and major depressive disorder (Annexure F).

Table 4.15 Phase one - Perceptions of responsibility

<table>
<thead>
<tr>
<th></th>
<th>Bipolar disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Skewness</td>
<td>.511</td>
<td>-.356</td>
<td>-.315</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25 Percentiles</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>50 Percentiles</td>
<td>2.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>75 Percentiles</td>
<td>3.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Phase two suggest a slight change from phase one. As illustrated in table 4.16 below, participants stereotypical beliefs about responsibility for illness related to bipolar mood disorder remained the same as in phase one (me=2; mo=2; 25th percentile=2; 75th percentile=3), with slightly less clustering around the lower scores (skewness statistic .410). Findings showed a slight reduction in perceptions of responsibility for major depressive disorder (mo=3) and reduction at the 75th percentile (4) reported in phase one.

Participants also showed some reduction in their stereotypical beliefs on schizophrenia (me=3; mo=3; and 75th percentile=4) compared to the scores reported in phase one (me=4; mo=5). Although schizophrenia and major depressive disorder have the same distribution at
the 25th and 75th percentiles (2 and 4 respectively), results for schizophrenia presented a higher commonly occurring score (mo=4) and a greater negative skew (-139). The skewness statistics for major depressive disorder showed a significant reduction in the clustering of scores around the negative polar adjective (from -315 reported in phase one to -040). This indicates that the content given to the students during their block decreased their perceptions of responsibility for causing own illness related to schizophrenia and major depressive disorder.

Table 4.16 Phase two - Perceptions of responsibility

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Skewness</td>
<td>.410</td>
<td>-.139</td>
<td>-.040</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Percentiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>50</td>
<td>2.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>75</td>
<td>3.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Phase three data suggest a slight increase in stereotypical beliefs reported in phase two on bipolar mood disorder (me=3; mo=3). Findings showed a decrease in skewness statistics on bipolar mood disorder (.037), suggesting a more even distribution in participants scores rather than a greater clustering around the lower scores. Schizophrenia showed a decrease in the mode (mo=3), but what appears to be a slight increase in overall perceptions of responsibility for illness (25th percentile=3; skewness statistic -162).

Participants scores on major depressive disorder remained the same as in phase two (me=3; mo=3; 25th percentile=2; 75th percentile=4), However an increase in the skewness statistics (-180) was noted, which suggests more clustering around the negative polar adjective. These results suggest that contact with a person with bipolar mood disorder and schizophrenia increased perceptions of responsibility for causing own illness than major depressive disorder.
Table 4.18: Phase one - Perceptions of inability to recover from illness

<table>
<thead>
<tr>
<th></th>
<th>Bipolar disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>2.50</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Skewness</td>
<td>.411</td>
<td>-.363</td>
<td>.148</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Percentiles</td>
<td>25</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>3.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

4.3.6 Perceptions of ability to recover

As illustrated in table 4.18 below, participants perceived persons with schizophrenia as the most unable to recover from illness (me=3; mo=3; 25\textsuperscript{th} percentile=3; 75\textsuperscript{th} percentile=5) compared to the other two labels, major depressive disorder (me=3; mo=2; 25\textsuperscript{th} percentile=2; 75\textsuperscript{th} percentile=4) and bipolar mood disorder (me=2; mo=2; 25\textsuperscript{th} percentile=2; 75\textsuperscript{th} percentile=3)

Schizophrenia showed the highest most commonly occurring score (mo=3); the highest distribution at the 25\textsuperscript{th} percentile (3); and at the 75th percentile (5). This suggests greater
perceptions of inability to recover associated with schizophrenia than bipolar mood disorder and major depressive disorder. This is confirmed by the frequency distributions, the skewness statistics and the std. error of skewness. Schizophrenia revealed a negative skew with a greater number of participants clustering on the right hand side of the distribution, the skewness (-.363) being more than the std. error of skewness (.211). However, major depressive disorder and bipolar mood disorder showed a positive skew, with a skewness of (.411) for major depressive disorder (almost twice the std. error of skewness (.211)) and a lower skewness of .148 for bipolar mood disorder, being less than the std. error of skewness (.211). This suggests that persons with major depressive disorder and bipolar mood disorder are less associated with perceptions of being unable to recover from illness than someone with schizophrenia. The histogram representation confirms the negative skew for schizophrenia (Annexure F).

**Phase two** data suggest a reduction in stereotypical beliefs reported in phase one. As illustrated in Table 4.19, participants scores on schizophrenia decreased and showed a more even distribution (25th percentile=2; skewness statistics -0.91) with participants’ scores not clustering around higher scores.

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid: 132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.333</td>
<td>-0.91</td>
<td>0.321</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>0.211</td>
<td>0.211</td>
<td>0.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Percentiles</td>
<td>50</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>75</td>
<td>3.00</td>
<td>5.00</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Participants’ scores also decreased on the major depressive disorder label at the 75th percentile (3). However, the mode increased (mo=3 with a multiple mode (a) and skewness statistic (.321), reflecting participant scores clustering more around lower values than in phase one. These results suggest that content received by participants during their block
reduced their perceptions of inability to recover associated with a major depressive disorder. Participants’ scores on bipolar mood disorder remained the same (me=2; mo=2; 25th percentile=2; 75th percentile=3), with a slight reduction on the skewness statistic (.333), which suggested that participants scores were not clustered as heavily around the lower scores after content. These results suggest that the content received by participants during their block seem to have decreased their perceptions of inability to recover from illness related to schizophrenia and major depressive disorder label, but increased perceptions of inability to recover for the bipolar mood disorder label. Although content seem to have reduced perceptions of inability associated with schizophrenia, this label remained the most heavily associated with negative polar adjectives than bipolar mood disorder and major depressive disorder labels.

**Phase three** data suggested an increase in the stereotypical beliefs reported in phase two. Participants scores reflected an increase on perceptions of a person with schizophrenia as unable to recover (25th percentile=3; skewness statistics -1.185), indicating that contact with a person with schizophrenia increased perceptions of inability to recover. Median scores related to bipolar mood disorder increased (me=3), as compared to scores reported in phase two with a slight decrease in the skewness statistics (.311) for the bipolar mood disorder label.

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>Valid</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td><strong>Missing</strong></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td></td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Skewness</strong></td>
<td></td>
<td>.311</td>
<td>-.185</td>
</tr>
<tr>
<td><strong>Std. error of skewness</strong></td>
<td></td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>25</strong></td>
<td></td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Percentiles</strong></td>
<td></td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>75</strong></td>
<td></td>
<td>3.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

These results suggest that contact with a person with bipolar mood disorder did little to change perceptions of participants after they had received content, apart from a slightly increased perception of inability to recover. With regards to the major depressive disorder
label, there was a slight reduction of the mode (mo=2), a slight decrease on the skewness statistic (.251), and an increase at the 75\textsuperscript{th} percentile (4).

The results suggest that although the schizophrenia label remained the most stigmatized, contact with mentally ill persons seems to have increased participants’ perceptions of inability to recover associated with all the three labels.

4.4 Total scores on the SDM: First scores

Data was exported to excel and the following scores computed; Firstly, a label specific score (bipolar mood disorder, schizophrenia and major depressive disorder) related to the six (6) stereotypical attitudes items (a maximum of 5 per stereotypical belief, a total possible score of 30 per label). Secondly, a total SDM score was generated for each participant (score of 15 for each stereotypical attitude applied to the three psychiatric labels times six stereotypical attitudes= a total possible score of 90 for the SDM). This was done for each of the three phases, each participant obtaining three score for each psychiatric label (phase 1, 2, 3).

4.4.1 Phase one scores

As illustrated in table 4.21 (p, 57), the results on total participants’ scores in the first phase of data collection indicate that the schizophrenia label is more associated with stigmatizing attitudes (me=22; mo=24; minimum=7; maximum=30; 25\textsuperscript{th} percentile=17; 75\textsuperscript{th} percentile=25). Schizophrenia is followed by major depressive disorder label (me=20; mo=17 with a multiple mode (a); minimum=6; maximum=30; 25\textsuperscript{th} percentile=16; 75\textsuperscript{th} percentile=24). The results suggest that bipolar mood disorder label was least associated with negative polar adjectives (me=16; mo=16; minimum=6; maximum=27; 25\textsuperscript{th} percentile=13; 75\textsuperscript{th} percentile=19). The distribution for the total scores displayed a negative skew to the right on schizophrenia, the skewness statistic (-520) being more than twice the size of the std. error of skewness (.211). These results suggest that greater numbers of participants reflected highest levels of negative polar adjectives related to schizophrenia. The participants reported greater perceptions associated with schizophrenia on all six stereotypical beliefs (dangerousness, unpredictability, dependency, unable to communicate, responsibility for causing own illness and inability to recover from illness).

Participants’ total scores on the major depressive disorder label also showed negative polar adjectives with a negative skewness statistics (-198) being more than double the std. error of
skewness (.211). Bipolar mood disorder reported a relatively even distribution, the skewness statistic (.190) being less than double the standard error of skewness (.211), suggesting less stigmatizing attitudes associated with the bipolar mood disorder label.

Table 4.21: Total scores - phase one

<table>
<thead>
<tr>
<th></th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>132</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>16.00</td>
<td>22.00</td>
<td>20.00</td>
<td>58.00</td>
</tr>
<tr>
<td>Mode</td>
<td>16</td>
<td>24</td>
<td>17a</td>
<td>58a</td>
</tr>
<tr>
<td>Skewness</td>
<td>.190</td>
<td>-.520</td>
<td>-.198</td>
<td>-.558</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Maximum</td>
<td>27</td>
<td>30</td>
<td>30</td>
<td>82</td>
</tr>
<tr>
<td>25 Percentiles</td>
<td>13.00</td>
<td>17.00</td>
<td>16.00</td>
<td>49.25</td>
</tr>
<tr>
<td>75 Percentiles</td>
<td>19.00</td>
<td>25.00</td>
<td>24.00</td>
<td>65.00</td>
</tr>
</tbody>
</table>

The distribution for total scores displayed a significant negative skew to the right (skewness=558). Overall, participants’ scores reflected high levels of stigmatizing attitudes, subtotal median scores (me=58; mo=58 with a multiple mode (58a); minimum=21; maximum=82; 25th percentile=49; 75th percentile=65).

4.4.2 Phase two scores

As illustrated in table 4.22 (p.58), the results suggest that schizophrenia remains more associated with stigmatising attitudes even after the participants had received content in their block (me=20; mo=20 with the multiple mode (20a); minimum=7; maximum=30; 25th percentile=17; 75th percentile=25), followed by the major depressive disorder label (me=18; mo=17; minimum=7; maximum=30; 25th percentile=15; 75th percentile=22). Bipolar mood disorder was associated with lesser stigmatizing attitudes compared to the other two labels (me=16; mo=17; minimum=7; maximum=28; 25th percentile=12; 75th percentile=19). Although both bipolar mood disorder label and a major depressive disorder label reflected the same mode scores (mo=17; bipolar mood disorder reported a lower distribution at the (25th percentile=12; 75th percentile=19) than the major depressive disorder label.
The distribution for the total scores displayed a negative skew to the right, the skewness statistic (-324) being more than the std. error of skewness (.211), somewhat less than the skewness statistics reported in phase one (-520) (before information), suggesting a slight reduction of stigmatizing attitudes after content. The major depressive disorder label also showed lower levels of negative polar adjectives compared to schizophrenia, (skewness - 175). The results suggest that participants’ perceptions in relation to schizophrenia were higher than major depressive disorder. Participants’ total scores suggest lower stigmatizing attitudes associated with bipolar mood disorder than with schizophrenia and major depressive disorder labels. Overall, participants’ scores suggest negative polar adjectives (me=56; mo=55; minimum=21; maximum=82; 25th percentile=46; 75th percentile=65). Furthermore, the distribution for the total scores reflected a negative skew, with the skewness statistics (-430) being more than twice the size of the std. error of skewness (.211).

### 4.4.3 Phase three scores

The third subtotal results suggest that schizophrenia remains the label most associated with negative polar adjectives, even after contact with a person with schizophrenia in a clinical setting (me=20; mo=23; minimum=6; maximum=30; 25th percentile=17; 75th percentile=23). This is followed by the major depressive disorder label (me=19; mo=21; minimum=6; maximum=30; 25th percentile=14; 75th percentile=22). The bipolar mood disorder label remains the least associated with stigmatizing attitudes compared to schizophrenia and major
depressive disorder labels (me=17; mo=18; maximum=6; minimum=26; 25th percentile=13; 75th percentile=19).

Table 4.23: Total scores - phase three

<table>
<thead>
<tr>
<th>N</th>
<th>Bipolar mood disorder</th>
<th>Schizophrenia</th>
<th>Major depressive disorder</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>132</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median</td>
<td>17.00</td>
<td>20.00</td>
<td>19.00</td>
<td>57.00</td>
</tr>
<tr>
<td>Mode</td>
<td>18</td>
<td>23</td>
<td>21</td>
<td>57</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.094</td>
<td>-.214</td>
<td>-.201</td>
<td>-.452</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
<td>.211</td>
</tr>
<tr>
<td>Minimum</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Maximum</td>
<td>26</td>
<td>30</td>
<td>30</td>
<td>79</td>
</tr>
<tr>
<td>25 Percentiles</td>
<td>13.00</td>
<td>17.00</td>
<td>14.00</td>
<td>47.25</td>
</tr>
<tr>
<td>50 Percentiles</td>
<td>17.00</td>
<td>20.00</td>
<td>19.00</td>
<td>57.00</td>
</tr>
<tr>
<td>75 Percentiles</td>
<td>19.00</td>
<td>23.00</td>
<td>22.00</td>
<td>62.00</td>
</tr>
</tbody>
</table>

Schizophrenia reported a negative skewness statistic (-214), being more than the std. with a slight reduction from the skewness statistic reported in phase two (-324 after information). The major depressive disorder label also showed some reduction in the skewness statistic (-201) compared to phase two, suggesting that contact seemed to have slightly increased negative polar adjectives towards this label. The bipolar mood disorder label showed the lowest negative skewness (-094), although there was a slight increase in stigmatizing attitudes noted in phase three (after contact). Participants’ total scores suggest higher stigmatizing attitudes associated with schizophrenia than major depressive disorder and bipolar mood disorder. The distribution for the total scores displayed a negative skew to the right, with the skewness statistic of (-452) being more than the std. error of skewness (.211). These results indicate that the participants displayed more stigmatizing attitudes towards people living with schizophrenia and major depressive disorder than bipolar mood disorder, even after clinical placement of the participants.

4.5 Associations

Associations were computed between scores on the SDM and demographic variables. The Mann-Whitney u Test was used to test for differences between two independent groups on a continuous measure, for example males and females. The Kruskal Wallis Test was used to
test association between cultural groups and stigmatizing attitudes, and was also used to test association between different age groups and stigmatizing attitudes.

4.5.1 Gender association

The Mann-Whitney u Test revealed a significant difference in the levels of stigmatizing among males (1) and females (2). Among a total 132 participants, females appeared to be holding more polar adjectives, (n=105, md=70) and males with less negative polar adjectives, (n=27, md=49.44).

In the second total scores, the Mann-Whitney u Test revealed no significant difference in levels of stigmatizing attitudes between females (n=105, md=67.37) and males (n=27, md=63.13). These results suggest that content given to the participants slightly reduced stigmatizing attitudes among females and increased negative polar adjectives among males.

In the third total scores, the Mann-Whitney U Test noted a slight difference among females and males. Females (n=105, md=70.3) appeared to be more stigmatizing than males (n=27, md=52.76). These results suggest that contact with a person with SMI slightly increased stigmatizing attitudes among females and slightly reduced stigmatizing attitudes among males.

4.5.2 Association with age

In the first total scores, the Kruskal-Wallis Test revealed a statistically significant difference in optimism levels across three different age groups. The youngest group (18-20, 1, n=2) reported higher levels of stigmatizing attitudes (md=87.25) than the other three age groups, followed by the older age group (41-50, 4, n=3, md=77.17). (21-30 age group 2, n=95 reported md=67.19). The last age group (31-40, 3, n=32, md=62.16).

In the second total scores, there were no significant differences in the levels of stigmatizing attitudes. The youngest age group 18-20 reported a slight reduction in stigmatizing attitudes compared to the first total scores (n=2, md=45). The results of the other age groups were: 21-30 years old (n=95, md=67.87); 31-40 years old (n=32, md=64.20); and 41-50 years old (n=3, md=62). These results suggest that content given to the participants had a slight effect as reduction of stigmatizing attitudes noted among the youngest age group which appeared to be more stigmatizing in the first total scores.
The third total scores showed that after contact the youngest age group again reported more negative polar adjectives (18-20 n=2, md=118) compared to the other three age groups. Age group 21-30 (n=95, md=66.68); and age group 31-40 (n=32, md=63.22). The older age group (41-50 n=3, md=61.50) appeared to have the least stigmatizing attitudes after contact with a person living with SMI.

4.5.3 Cultural associations

The first total scores reflected a significant difference between cultural groups. Indians(3) (n=24, md=82.67) appeared to be the most stigmatizing cultural group compared to the other two groups, followed by Coloureds (2) (n=9, md=66.28). Blacks (1) appeared to have less negative polar adjectives (n=99, md=62.60).

The second total scores showed that the stigmatizing attitudes had changed among the different cultural groups. Coloureds (2) appeared to hold more negative polar adjectives (n=9, md=99.40, followed by Indians (3) (n=24, md=68.94). Blacks (1) showed less negative polar adjectives, even after content given to the participants.

A slight change was noted among the different racial groups in relation to stigmatizing attitudes in the third total scores. Indians (3) appeared to be the most stigmatizing cultural groups compared to the other two cultural groups, with (n=24, md=73.96), followed by Blacks (1) with (n=99, md=65.66). Coloureds (2) appeared to be less stigmatizing after contact of the participants with a person with SMI with (n=9, md=55.99).

4.6 Summary

This chapter presented the findings of the study. The sample included participants of both genders and three cultural groups, with more female representatives n=104 (18%) and less male representatives n=28 (21.2%). The overall findings suggest that people with SMI are faced with high stigmatizing attitudes. Participants’ scores suggested more negative polar adjectives associated with the schizophrenia label in all the three phases of data collection, followed by the major depressive disorder label, bipolar mood disorder being the least associated with negative polar adjectives, which changed slightly after contact of the participants with patients with SMI. Content slightly reduced stigmatizing attitudes towards schizophrenia and slightly increased negative polar adjectives towards bipolar mood disorder.
label. Contact also reduced stigmatizing attitudes towards schizophrenia, but slightly increased towards bipolar mood disorder and a major depressive disorder.

The next chapter will discuss the findings and the limitations of the study. It will also present the recommendations.
CHAPTER FIVE
DISCUSSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter discusses the findings of the study and the study limitations and provides recommendations for future research. The discussion of the findings of the study is based on the objectives and research questions of the study. The objectives of the study were to describe the stereotypical beliefs associated with specific mental illness labels of student nurses completing the psychiatric nursing component of the four year program (R425) in the eThekwini District of KwaZulu-Natal and to describe the mediating effects of knowledge and contact as they relate to stereotypical beliefs associated with specific mental illness labels. The discussion will be in the context of the relevant literature and conceptual framework of the study.

5.2 Discussion
The results of this study confirm some of the findings of previous researchers which suggest negative polar adjectives associated with common stereotypes relating to dangerousness, unpredictability, responsibility for causing own illness and inability to recover from mental illness (Chambers et al., 2010; Rusch et al., 2010; Sadik et al., 2010; Smith, 2010; Yang et al., 2007). Stigmatizing attitudes were strongly evident in this study, showing that mental illness stereotypical beliefs are alive and well, specifically with regard to schizophrenia, which was strongly associated extreme negative polar adjectives on all characteristics (dangerousness, unpredictability, incompetence, impaired communication responsibility for causing own illness and inability to recover from illness). This is no different from results of previous national and international results (Chambers et al., 2010; Rusch et al., 2010; Sadik et al., 2010; Yang et al., 2007).

In contrast to previous international studies, however, this study showed that the bipolar mood disorder label fared better than major depressive disorder label. It is possible that the participants associated bipolar mood disorder with the least negative polar adjectives because this label is more advocated for compared to schizophrenia and major depressive disorder. For instance, bipolar mood disorder has a support group page on one of the international networks (Facebook Friday) and there is often open communication programmes within the media about this specific label. There are also prominent role models who are known to be
living with bipolar mood disorder, who are seen to be successful in all aspects of life, which could have contributed to participants’ perceptions of bipolar mood disorder being different from other mental illnesses labels. Ay et al. (2006) report similar results as this study, with more negative polar adjectives detected among medical students towards major depressive disorder. Studies looking at registered nurses indicate that qualified staff with higher levels of education, and those with specialised psychiatric training hold more positive attitudes (Chambers et al., 2010; Markstrom et al., 2009; Ay et al., 2006). Regarding the second research objective of assessing the potential mediating effects of education and contact, literature argues that education aims to reduce stigma by providing accurate information about mental illness. It is assumed that a better understanding of mental disorders will reduce stigmatizing attitudes, specifically amongst mental health care professionals (especially nurses) towards people living with mental illness (Corbiere, Samson, Villotti & Pelletier, 2012). However, research also shows that education can have less positive effects, depending on the setting. For example, mental health students are reported as more likely to believe that people with mental illness are less responsive to treatment and are more unlikely to recover completely from mental illness (Corrigan & Shapiro, 2010; Corbiere et al., 2012). Brief educational courses on mental health have proved to reduce stigmatizing attitudes among different participants in various professions (police, industrial workers, high school students, health care professionals). However, research suggests that the educational programmes are more effective to participants who have had previous exposure to mental illness (Corrigan & Shapiro, 2010; Rusch et al., 2010).

Within this study, the curriculum content given to participants during their study block consisted of comprehensive care; psychiatric disorders; causative theories, symptom presentations, associated behaviour manifestations and nursing interventions. This content (educational information) seemed to have slightly reduced participants’ negative polar adjectives associated with schizophrenia and major depressive disorder, but conversely seemed to increase participants’ negative stereotypes related to the bipolar mood disorder label.

In a study conducted in Nigeria among doctors and community members, it was discovered that knowledge did not change the discriminating attitudes towards mentally ill people (Adewuya & Oguntade, 2007). More than 80% of the doctors indicated that they would not
marry someone with mental illness and 64.1% would not share a room with someone with mental illness (Adewuya & Oguntade, 2007).

Studies carried out in different communities indicated that contact with people living with mental illness improves attitudes towards them (Adewuya & Oguntade, 2007; Ay et al., 2006; Arvaniti et al., 2009; Markstrom et al., 2009). Contact of participants with mentally ill patients slightly reduced negative polar adjectives towards schizophrenia; however it seemed to have slightly increased stigmatizing attitudes towards bipolar and major depressive disorder labels. As indicated in chapter two, it is possible that this could be resulting from the fact that health care professionals only interact with mentally ill people when they are acutely ill and in need of services (Ay et al., 2006; Corrigan, 2007). Another reason of professionals’ endorsement of stigma even after contact with a mentally ill person is their focus on diagnosis and psychopathology, as they are looking at mentally ill people in terms of the diagnostic group rather than individuals (Ay et al., 2006; Corrigan, 2007; Markstrom et al., 2009). Health care professionals are unlikely to interact with their clients when they have recovered and are living normal lives (Ay et al., 2006; Corrigan, 2007).

As reported in chapter two, current studies indicate that student nurses changed their attitudes in one respect after clinical placement in that they believed that persons with schizophrenia could pull themselves together (Markstrom et al., 2009). They showed less stigmatizing attitudes regarding people living with mental illness on perceptions of dangerousness (p=0.002), had themselves to blame (p=0.002), and had less potential for improvement (0.024) (Markstrom et al., 2009). Similarities were found in a study conducted in Iraq among mental health care professionals, including general practitioners, the majority of whom had reported experiences of having friends, relatives or colleagues with SMI (familiarity with mental illness) (Sadik et al., 2010). Results of this study showed that 60% of the respondents thought people with mental illness should not get married or have children, while under half thought one should avoid contact with a person with mental illness (Sadik et al., 2010). However two thirds of the participants thought that people living with mental illness should not hide their diagnosis from their relatives and half of the respondents disagreed with the statement that mental illness cannot be cured (Sadik et al., 2010).

The findings of this current showed that contact only reduced stigmatizing attitudes to a small degree with respect to schizophrenia, but a slight increase was noted towards major depressive disorder and bipolar mood disorder.
5.3 Limitations of the study

The results of this study may not represent the entire population since one racial group was not represented among the participants which could have had an impact on the results of the study. Some of the Academic institutions not included in the study started their block two weeks after the four included institutions where data was collected. In addition, the study population represented one academic institution in one province. Although the curriculum is standard, broad content dictated by the college, individual lecturers’ may have placed emphasis on specific content, their own beliefs coloring the delivery of content. In addition, clinical exposure is not identical, clinics, wards and acute versus chronic. Both factors, individual approach of lecturers and differing clinical exposure schedules, may have influenced participants experiences and thus responses within this study.

5.4 Recommendations

Health care professionals, particularly nurses, should be aware of their attitudes towards mentally ill people. As role models in the community, they need to know that they have a responsibility to improve their attitudes in order to make anti-stigma campaigns a reality. It is therefore recommended that existing policies be reinforced and monitored, and that the Department of Health should collaborate with other departments, such as Social Development, the Department of Education and the police, to ensure that they include mental health care in their agendas (Adewuya & Oguntade, 2007; Adewuya & Makanjuola, 2008; Smith, 2010).

5.4.1 Recommendations on education

It is recommended that the proposed new curriculum be reviewed to include psychosocial rehabilitation to ensure that there are programmes dealing with the impact of culture on nursing education. It is also recommended that student nurses have some form of interaction with fully recovered clients during their clinical placement to alter their stereotypical beliefs that one cannot recover from mental illness (Adewuya & Oguntade, 2007; Adewuya & Makanjuola, 2008; Corrigan, 2007; Smith et al, 2010). It is highly recommended that the clinical hours of student nurses in clinical placement be increased and that they make contact with patients who, although they have mental illness, are living normal lives. This will reduce perceptions of inability to recover, especially for those with schizophrenia, which seem to be more stigmatized internationally. Inclusion of mental health care content in all post basic
courses (e.g. orthopaedics) is also recommended to ensure that all registered nurses who do have a mental health care qualification have a basic knowledge of mental health illness to ensure holistic care of patients.

5.4.2 Recommendations on practice

Allocation and rotation of different levels of nurses is recommended. For example an enrolled nursing assistance and enrolled nurses being deployed in psychiatric departments under close supervision of a mental health care nurse to ensure contact of different personal with mentally ill patients as it is suggested that contact reduces stigmatizing attitudes. It is also recommended that employment criteria for a clinical nurse practitioner in Primary Health Care (PHC) include a mental health care qualification to ensure quality care of patients.

5.4.3 Recommendation on research

Since mental health care is incorporated in Primary Health Care, it is recommended that more research be conducted in South Africa among patients with different mental illness labels and their relatives in order to share their experiences about stigmatizing attitudes of health care professionals, especially the clinical practitioners working in Primary Health Care settings.

5.5 Conclusion

The results of the study confirmed that health care professionals are not different from the rest of the population in endorsing stigmatizing attitudes towards mentally ill patients. Schizophrenia was the label most associated with negative polar adjectives on all characteristics of the Semantic Differential Measure (SDM). Findings revealed that education strategies on mental illness have slight positive effect in terms of reducing stigmatizing attitudes. Contact with a person living with mental illness seemed to slightly reduce stereotypical beliefs associated with schizophrenia, but surprisingly slightly increased negative stereotypical beliefs associated with bipolar mood disorder and major depressive disorder.
REFERENCES


ANNEXURE A; (A copy per participants in addition to being read to each group of participants)

Information and consent sheet

Mrs. Cecilia Mbongwe is a student doing a master’s degree in Mental Health Nursing at the University of KwaZulu-Natal. She is requesting your participation in a research study that aims to look at student nurses beliefs about specific mental illnesses. This research is part of the requirements for her Masters credentialing. The aim of the research is to gather information that can be used to inform the development of the psychiatric nursing module, specifically educational content and clinical placement.

Please note that participation is voluntary and you are free to refuse to participate by simply not filling in the questionnaire and posting the blank questionnaire in the box provided. There will be no repercussions should you decide that you do not want to participate.

The self-report questionnaire will be presented to you three times; today, on the last day of this block and for the last time on the first day of your second block. For this reason the questionnaire requires you to fill in your student number so that questionnaires completed at the three different times can be cross referenced. Results will be coded and your student number and the name of the campus will not appear in the final report or any publication that may be written once the research is complete. All completed questionnaires will be kept confidential, only Mrs. Mbongwe and her research supervisor Ms. Amanda Smith will have access to this data.

Completion of the questionnaire should take approximately 30 – 45 minutes.

The questionnaire has instructions for completion and requires no writing on your part, you will be asked to tick specific responses only. There is no correct answer, merely record your beliefs and opinions honestly A box is provided where you can drop the questionnaire. A copy of the final report will be submitted to UKZN and you may have access through the School of Nursing and Public health. In addition during your revision block Mrs. Mbongwe will provide you with a brief presentation of the analyzed data.
The findings of the study will also be communicated to KZNCN management to inform curriculum development, course content and clinical placement.

Should you wish to contact the researcher or her supervisor for more information their contact details are:

Mrs. C Mbongwe  E-mail cecilia.mbongwe@kznhealth.gov.za  
Contact number: 0822952558.

My supervisor is Miss Amanda Smith  
E-mail smitha1@ukzn.ac.za  
Contact number: 0829289296
ANNEXURE B: Self report questionnaire

QUESTIONNAIRE

DO NOT WRITE YOUR NAME ANYWHERE ON THIS DOCUMENT
STUDENT NUMBER: _______________________

The questionnaire has two sections. Please complete all items in all sections.

Section 1
Answer each of the three questions by ticking the box next to your response. Tick only one per question.

1. Select and tick the box that represents your age category in years at your last birthday

   18-20
   21-30
   31-40
   41-50
   51-60

2. Select and tick the box that represents your gender

   Male
   Female

3. Select and tick the box that represents your cultural group

   Black
   Indian
   Coloured
   White
Each question requires you to rate each category of person, listed on the left hand side of the table, against the comment at the top of the table.

**For example,**

Question 1 asks you to rate the level of dangerousness of four categories of people (the ‘average person’, a person with a bipolar mood disorder, a person with schizophrenia, and a person with a major depressive disorder). Number 1 is the lowest rating (i.e. ‘not dangerous at all’) and 5 is the highest rating (i.e. ‘very dangerous’).

You may choose only one number for each person per question. Thus at the end of each question you should have recorded one tick per line, a total of four ticks per question box.

**This process is repeated for all 6 questions**

<table>
<thead>
<tr>
<th></th>
<th>Is not a danger</th>
<th>Is very to others dangerous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The ‘average person’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with bipolar mood disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with schizophrenia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with a major depressive disorder</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Is consistent</th>
<th>Is unpredictable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The ‘average person’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with bipolar mood disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with schizophrenia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with a major depressive disorder</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Is independent and self-sufficient</th>
<th>Is dependent unable to care for self</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>The ‘average person’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with bipolar mood disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with schizophrenia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with a major depressive disorder</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Is easy to talk with
   To talk with

| The ‘average person’ |   |   |   |   |   |
| A person with bipolar mood disorder |   |   |   |   |   |
| A person with schizophrenia |   |   |   |   |   |
| A person with a major depressive disorder |   |   |   |   |   |

5. Is unable to prevent illness
   Contributes to ill health

| The ‘average person’ |   |   |   |   |   |
| A person with bipolar mood disorder |   |   |   |   |   |
| A person with schizophrenia |   |   |   |   |   |
| A person with a major depressive disorder |   |   |   |   |   |

6. Fully recovers from illness
   never recovers from illness

| The ‘average person’ |   |   |   |   |   |
| A person with bipolar mood disorder |   |   |   |   |   |
| A person with schizophrenia |   |   |   |   |   |
| A person with a major depressive disorder |   |   |   |   |   |

Thank you
ANNEXURE C

KWAZULU-NATAL COLLEGE OF NURSING
P/Bag X9086, Pietermaritzburg, 3200
Tel.: (033) 264 7800, Fax: (033) 394 7238
e-mail: luisma.mihembu@kznhealth.gov.za
www.kznhealth.gov.za

Enquiries: Mrs. S. Maharaj
Telephone: 033 – 264 7806
Date: 20 November 2012

Principal Investigator:
Ms. CM Mbongwe(991262279)
School of Nursing
University of KwaZulu-Natal

Dear Madam

RE: REQUEST TO UNDERTAKE RESEARCH AT THE KWA-ZULU NATAL
COLLEGE OF NURSING- (SOUTH)

I have pleasure in informing you that permission has been granted to you by the
Principal of the KwaZulu-Natal College of Nursing to conduct research on

Title: "DESCRIBABLE PSYCHIATRIC NURSING STUDENT'S STEREOTYPICAL
BELIEFS ASSOCIATED WITH MENTAL ILLNES LABELS"

Please note the following:

1) Please ensure that you adhere to all policies, procedures, protocols and
guidelines of the Department of Health with regards to this research.
2) This Research will only commence once this office has received confirmation
from the Provincial Health Research Committee in the KZN Department of
Health.
3) You are required to be specific about which campuses on the South you will be
utilizing, and make arrangement with the respective Principals, prior to
commencing your research
4) Please ensure this office is informed before you commence your research.
5) The Campus will not provide any resources for this research.
6) You will be expected to provide feedback on your findings to the Principal of the
KwaZulu-Natal College of Nursing.

Thanking You.

Sincerely

Ms. JT Makhathini
Acting Principal-KwaZulu-Natal College of Nursing

____________________________________
umnyango Wezempilo. Departement van Gesondheid
Fighting Diseases, Fighting Poverty, Giving Hope.
Dear Mrs C M Mbongwe

Subject: Approval of a Research Proposal

1. The research proposal titled ‘Describe psychiatric nursing student’s stereotypical beliefs associated with mental illness labels’ was reviewed by the KwaZulu-Natal Department of Health.

The proposal is hereby approved for research to be undertaken at the selected 8 KwaZulu-Natal College of Nurses’ campuses.

2. You are requested to take note of the following:
   a. Make the necessary arrangement with the identified facility before commencing with your research project.
   b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.

3. Your final report must be posted to HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200 and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mrs G Khumalo on 033-395 3189.

Yours Sincerely

[Signature]

Dr E Lutgê
Chairperson, Health Research Committee
KwaZulu-Natal Department of Health

Date: 29 November 2012

uMnyango Wezempiyo, Departement van Gesondheid

Fighting Disease, Fighting Poverty, Giving Hope
03 December 2012

Mrs. C.M. Mbongwe (991262279)
22 Ahrens Road
Bluff
4052

Dear Mrs C.M. Mbongwe

REQUEST TO CONDUCT RESEARCH AT EDENDALE NURSING CAMPUS
Protocol: "Describe psychiatric nursing student’s stereotypical beliefs associated with mental illness"

Your letter received on 20.11.12 refers.

We are pleased to inform you that the permission is granted provided:
- Confidentiality is maintained at all times
- Your research does not interfere with smooth running of the Campus
- Proper consent is obtained from the participants

Thank you
Yours sincerely

Dr N.V. Mkhize
(Chairperson Research committee)

Mrs N.C. Majola
(Campus principal)

uMnyango Wezempilo . Departement van Gesondheid
Fighting Disease, Fighting Poverty, Giving Hope

80
17th May 2013

Mrs. C.M. Mbongwe
22 Ahrens Road
BLUFF
Durban
4052

Dear Mrs. Mbongwe

Re: Request for permission to conduct study at Grey's Campus

Your e-mail is received and acknowledged.

Permission is granted for you to conduct research at this Campus.

Kindly liaise with me to make the necessary arrangements for you to conduct research at this Campus.

You are wished all the best with your studies.

Yours Faithfully

E.N. Hlongwa (Rsa)
Campus Principal
17 September 2012

Ms Cecilia M Mbongwe (091262279)
School of Nursing and Public Health
Howard College Campus

Dear Ms Mbongwe

Protocol reference number: HSS/038/012M
Project title: Describe psychiatric nursing student's stereotypical beliefs associated with mental illness labels

In response to your application dated 31 May 2012, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

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

Yours faithfully

[Signature]
Professor Steven Collings (Chair)
Humanities & Social Science Research Ethics Committee

cc Ms A Smith
cc Professor M Mars
cc Mrs Caroline Dhanraj
ANNEXURE E

Perceptions of danger with bipolar disorder label

Mean = 2.03
Std. Dev. = 1.15
N = 132

Perceptions of danger with schizophrenia

Mean = 3.6
Std. Dev. = 1.21
N = 132
Perceptions of responsibility with bipolar disorder for causing own illness

Mean = 2.49
Std. Dev. = 1.182
N = 132

Perceptions of responsibility with schizophrenia for causing own illness

Mean = 3.42
Std. Dev. = 1.438
N = 132
Perceptions of responsibility with major depressive disorder

Mean = 3.39
Std. Dev. = 1.36
N = 132

Perceptions of recovery with bipolar disorder

Mean = 2.61
Std. Dev. = 1.20
N = 132