

**MENTAL HEALTH LITERACY OF UNDERGRADUATE
NURSING STUDENTS AT A UNIVERSITY
IN THE WESTERN CAPE**

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ABSTRACT

Background: Mental illness is recognised as a global public health concern due to the significant amount of morbidity and disability accounted for by mental illness. Additionally, the stigma and discrimination towards mentally ill persons are a global concern and have a significant impact on public health. Limited knowledge, negative attitudes and discriminatory behaviours are associated with reduced help-seeking behaviour, under-treatment and social exclusion of mentally ill persons. Ignorance about mental health problems has contributed significantly to stigmatisation resulting in the coining of the term ‘mental health literacy’. Research suggests that nursing students have mental health literacy levels comparable to those of the general public or layperson at the start of their studies, and various other studies report that nursing students have negative attitudes towards, and poor knowledge of, mental illness. It is therefore important to address the mental health literacy of undergraduate nursing students, as a lack of skills and negative perceptions create a barrier to nursing students’ ability to engage with, and care for, mentally ill patients.

Aim and objectives: The aim of the study was to determine the mental health literacy of undergraduate nursing students at a selected university in the Western Cape, South Africa. The study had two objectives, which were (1) to determine undergraduate nursing students’ knowledge of mental illness and (2) to determine undergraduate nursing students’ attitudes that promote recognition of mental disorders and help-seeking.

Method: A quantitative, descriptive survey design was used to conduct this study at a university in the Western Cape. The target population consisted of 1162 student nurses who were registered in the Bachelor of Nursing programme at the selected university in 2019. The sample for the study was 294 nursing students.

The mental health literacy scale (MHLS) was distributed to the participants for data collection and the response rate was 100%. Data analysis was done with the aid of a statistician using the Statistical Package for the Social Sciences, version 25. Nominal as well as ordinal data were analysed using descriptive analysis. The process and purpose of the study were explained to the participants, who gave their consent prior to the distributing of the questionnaires. The researcher obtained permission from the registrar of the university before commencing with the study.

Findings: The study found that the nursing students who participated in this study generally had good knowledge of mental disorders and maintained positive attitudes towards mental illness and appropriate help-seeking for mental illness; however, they also maintained some negative attitudes towards mental illness, especially in the aspect of social distance from mentally ill persons.

Recommendations: A qualitative approach may provide a better understanding of nursing students' mental health literacy, especially regarding attitudes towards mental illness and help-seeking behaviour.

KEYWORDS

Attitudes

Help-seeking

Knowledge

Mental health literacy

Mental illness

Nursing students



ABBREVIATIONS

HSSREC – Humanities and Social Sciences Research Ethics Committee

MHL – Mental health literacy

MHLS – Mental Health Literacy Scale

SoN – School of Nursing

SPSS – Statistical Package for the Social Sciences



DECLARATION

I declare that the study, *Mental health literacy of undergraduate nursing students at a university in the Western Cape*, is my original work, that it has not been submitted for any degree or examination at any other university, and that all the sources I have used, or quoted, have been indicated and acknowledged by complete references.

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Petersen



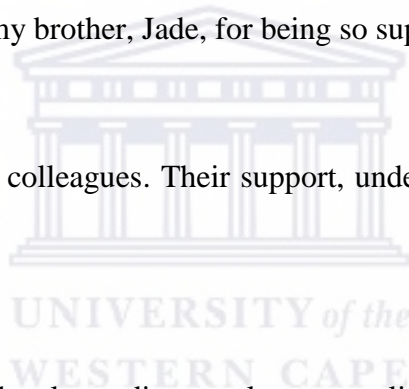
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CHAPTER ONE: ORIENTATION TO THE STUDY

1.1. Introduction

Mental illness is recognised as a public health concern worldwide due to the significant amount of morbidity and disability accounted for by mental illness (Tibebe & Tesfay, 2015), accounting for 14% of premature deaths and years lived with disability globally (Jack-Ide, Amiegheme & Ongutubor, 2016). In spite of this, mental health literacy (MHL) has been found to be poor in developing countries, which is thought to be a contributory factor to the high incidence of mental illness and the associated disability and morbidity (Tibebe & Tesfay, 2015).

At the start of their studies, nursing students have MHL levels comparable to those of the general public or layperson (Crawford et al., 2015; McCann & Clark, 2010). A study conducted by Bekhet, Murrock, Mu and Singh-Gill (2017) found that some students reported not feeling comfortable with mentally ill patients as they do not know much about them. Many studies have found that nursing students typically have negative attitudes towards mental illness and psychiatric nursing (Bekhet, et al., 2017; Ong et al., 2017). It is therefore important to address the MHL of undergraduate nursing students, as a lack of skills and negative perceptions create a barrier to nursing students' ability to engage with, and care for, mentally ill patients (Bekhet et al., 2017). Furthermore, nursing students' negative attitudes towards mental illness and mental health care users are also thought to have contributed to a lack of interest in psychiatric nursing and deter student nurses from choosing careers in mental health (Ong et al., 2017; Furr, 2014; Happel & Gaskin, 2012).

1.2. Background

The stigma of mental illness and discrimination against mentally ill persons are global concerns and have a significant impact on public health (Evans-Lacko et al., 2012; Egbe et al., 2014). Byrne (2000) described the stigma attached to mental illness as a powerful negative attribute that occurs in all social relations. Limited knowledge, negative attitudes and discriminatory behaviours are associated with reduced help-seeking behaviour, under-treatment and social exclusion of mentally ill persons (Evans-Lacko et al., 2012). Various researchers have stated that negative or stereotypical attitudes towards mental illness are a prominent reason for poor help-seeking behaviour and reluctance to continue treatment for mental illness (Hocking, 2003; Jorm et al., 2006; Ross & Goldner, 2009; Pinto-Foltz & Logsdon, 2009). Previous studies have found that mentally ill persons are stigmatised by the general population and suggested that health care professionals, including student nurses, have similar attitudes towards mental illness as the general public (Furr, 2014; Bekhet et al., 2017).

Ignorance about mental health problems has contributed significantly to stigmatisation, resulting in the coining of the term 'mental health literacy' (Jorm, 2000). MHL is the knowledge and beliefs about mental disorders that assist in awareness, prevention and management of these conditions (Jorm, 2000:396). The purpose of the term's development was to raise awareness of the concept of MHL and to highlight neglected areas in research (Jorm et al., 2006).

Jorm et al. (2006) has suggested that when compared to the acceptance of the benefits of public knowledge about physical diseases, MHL has been neglected. While people are often knowledgeable about common physical diseases, many people are ignorant of mental health problems (Kitchener & Jorm, 2006; Furnham, Gee & Weis, 2016). According to Jorm (2012),

mental disorders have received significantly less attention than major physical diseases and there is evidence from numerous countries suggestive of poor MHL. Research conducted in South Africa found that some South Africans with psychiatric disorders are unsure of their diagnosis and appropriate available treatments (Hugo et al., 2003). Similarly, a study conducted by Chipps et al. (2015) found that some South Africans were unable to identify their mental disorder and were not knowledgeable of the causes of the disorders. Another study done in South Africa found that Zulu people considered Western medicine useful for treating physical illness but not for mental illness, which was thought to be understood exclusively by traditional healers from their own culture (Anderson et al., 2013). Kitchener and Jorm (2006) suggest that this ignorance contributes to the stigma associated with mental illness and is a barrier to appropriate and beneficial help-seeking behaviours. Crawford et al. (2015) have said that recognising mental disorders and reducing stigma promotes help-seeking from suitable sources.

According to Tibebe and Tesfay (2015), the norms, beliefs and customs of an individual's culture also influence how mental disorders are perceived or recognised. In many African societies mental illness is believed to be caused by a familial defect or demons and evil spirits, thus people perceive those with mental illness as outcasts or people who should be quarantined (Ndetei, Khasakhala & Mwayo, 2011). Additionally, supernatural phenomena such as witchcraft and evil spirits are considered to be important causes of mental illness (Shrestha, 2013). Studies conducted in African countries found that many African people perceived supernatural powers to be the cause of mental illness and preferred traditional sources of help, such as witchcraft (Tibebe & Tesfay, 2015). According to Sorsdahl et al. (2009), mental health problems are perceived to be due to ancestors or bewitchment, and traditional healers or religious advisors are the preferred source of help. According to Albuquerque-Sendín et al.

(2018), the presence of traditional healers creates a significant barrier to mental health care as they discourage the use of medication in the treatment of mental illness.

In South Africa, it was found that religious leaders were more frequently consulted than traditional healers, and of those who consulted traditional healers, the majority were black South Africans (Tibebe & Tesfay, 2015). Another study found that people experiencing religious or spiritual problems that negatively affect their mental health are reluctant to seek professional help and prefer informal and religious sources of support (Currier et al., 2018). In addition, the same study reported that people experiencing religious or spiritual problems experience greater somatic symptoms and poorer prognosis for counselling or psychotherapy, indicating that mental health care services need to be culturally sensitive in order to provide effective services to people struggling with their faith or spirituality (Currier et al., 2018).

There is evidence to suggest that increasing the MHL of a community decreases mental illness stigma within the community and improves community members' mental health (Crawford et al., 2015). Evidence suggests that educational interventions and enhancing MHL, as well as encouraging contact with mentally ill persons, are known to reduce the stigma against mental illness (Wang & Lai, 2008). Research suggests that improving MHL through training is effective to improve the MHL of undergraduate student nurses and promotes positive attitudes towards mental illness even after graduation (Crawford et al., 2015). Thus, addressing the MHL of student nurses may be an effective intervention to reduce negative attitudes and stigma among them (Crawford et al., 2015), as well as among the general public.

1.3. Problem statement

Mental health challenges are among the most pertinent challenges within health care worldwide, and contribute significantly to the global burden of disease (McInnis & Merajver, 2011). In South Africa, neuropsychiatric disorders are the third largest contributor to the burden of disease (South African Department of Health, 2013). While mental illness occurs in all populations, most people experiencing a mental disorder live in developing countries (Kermode et al., 2009). Despite this, MHL has been found to be poor in developing countries (Tibebe & Tesfay, 2015).

At the start of their studies, student nurses have MHL levels comparable to those of the general public or layperson (McCann, Lu & Berryman, 2009; McCann & Clark, 2010; Crawford et al., 2015). Furthermore, international studies have found that undergraduate student nurses maintain the same stigmatising attitudes as the general public (Happell & Gough, 2009; Furr, 2014) and that, as a result, nursing students have negative attitudes and stereotypes towards mental illness and are reluctant to pursue careers in psychiatric nursing (Dunman et al., 2017; Thongpriwan et al., 2015). According to Happell and Gough (2007), student nurses continue to maintain negative stereotypes of mental health care and people with mental illnesses despite receiving adequate education. Little is known about the MHL of undergraduate nursing students in South Africa.

MHL has been identified as being significant for mental health as it has the potential to improve the health of individuals and the population at large (Wei et al., 2015). Evidence suggests that MHL is effective to “improve mental health knowledge, decrease stigma and enhance health seeking behaviours” (Wei et al., 2016:1). Therefore, determining the MHL of undergraduate

nursing students may facilitate the development of interventions that can enhance their knowledge of, and promote positive attitudes toward, mental illness.

1.4. Aim of the study

The aim of the study is to determine the MHL of undergraduate nursing students at a university in the Western Cape, South Africa.

1.5. Objectives of the study

- Determine undergraduate nursing students' knowledge of mental illness.
- Determine undergraduate nursing students' attitudes that promote recognition of mental disorders and help-seeking.

1.6. Significance of the study

The findings may contribute to the development of effective strategies, such as training programmes and mental health first aid courses, which have been proven to be effective in enhancing the MHL of undergraduate students (Crawford et al., 2015). Furthermore, MHL training programmes have also been effective in reducing the stigma associated with mental illness among undergraduate nursing students (Crawford et al., 2015). Enhancing the MHL of undergraduate nursing students is important because it promotes positive attitudes towards mental illness, even after graduation, thus enhancing the patient care they provide (Crawford et al., 2015). There is a need to promote the prevention of mental illness, and if nursing students have good MHL, they can use this knowledge to inform others on how to reduce their own and others' risk of developing mental illnesses (Jorm et al., 2006). Lastly, the findings of this study will contribute to the literature of knowledge of MHL of nursing students and is important for future research.

1.7. Research methodology

A quantitative, descriptive survey design was selected to achieve the aim of this study. The Mental Health Literacy Scale (MHLS) was used to collect data in this study. The research design, instrument and data collection process employed in this study will be discussed in Chapter 3.

1.8. Definitions of key concepts

- **Ability to recognise specific disorders:** the ability to recognise symptoms of a disorder, a specific disorder or a category of disorders (O'Connor & Casey, 2015a).
- **Attitudes:** a set of beliefs, feelings and behaviour towards a particular subject (Cherry, 2019). For the purpose of this study, attitudes will refer to the beliefs, feelings and behaviour towards mental illness and people with mental illness.
- **Attitudes that promote recognition and appropriate help-seeking:** beliefs, feelings or behaviours that affect or influence the recognition of mental disorders and help-seeking behaviours (O'Connor & Casey, 2015a).
- **Knowledge:** the ability to recognise specific disorders, knowledge of how to seek mental health information, knowledge of self-treatment and knowledge of professional help available.
- **Knowledge of how to seek mental health information:** knowledge of where to gain access to information and the ability to do so (O'Connor & Casey, 2015a).
- **Knowledge of professional help available:** knowledge of mental health professionals and services they offer (O'Connor & Casey, 2015a).

- **Knowledge of self-treatment:** knowledge of common treatments suggested by mental health care professionals, as well as methods a person can use (O'Connor & Casey, 2015a).
- **Mental health literacy:** the “knowledge and beliefs about mental disorders which aid their recognition, management or prevention” (Jorm, 2000:396), as measured by the MHLS.
- **Mental illness:** a positive diagnosis of a mental health-related illness in accordance with accepted diagnostic criteria by a mental health care professional qualified to make such a diagnosis (South Africa, 2002).
- **Psychiatric hospital:** a hospital that provides care, treatment and rehabilitation to persons with mental illnesses (South Africa, 2002).
- **Undergraduate nursing student:** a person registered as a learner nurse as prescribed in the Nursing Act 33 of 2005, under section 33 (South Africa, 2005: s 33). For the purpose of this study, nursing students will refer to male and female first-, second-, third- and fourth-year undergraduate nursing students enrolled in the Bachelor of Nursing programme at the selected institution of higher education.

1.9. Chapter outline

This chapter provided the background for this research study. In addition, it presented the problem statement, aim of the study, objectives of the study, significance of the study, research methodology and definition of key concepts, as well as a brief description of the research methodology.

The remaining chapters will be presented as follows:

Chapter 2: Literature review – this chapter consists of a review of literature that supports the aim and objectives of this research study. It includes the definition of MHL, undergraduate

students' knowledge of mental illness and their attitudes towards mental illness and help-seeking.

Chapter 3: Research methodology – this chapter describes the research methodology used in the study. It includes a detailed description of the research design and research instrument, the research setting and the study population. It also describes the sampling technique employed in this study, the sample size and the data collection process.

Chapter 4: Research findings – in this chapter, the results obtained after data analysis are described and presented in graphs and tables.

Chapter 5: Discussion of findings – in this chapter, the findings are interpreted and discussed.

Chapter 6: Conclusion, limitations and recommendations – in this chapter, the aim, objectives and finding of this study are recapitulated. The limitations of the study are indicated and possible areas for future research are identified.

1.10. Summary

This chapter comprised an exposition of the orientation of the study, which was focused on an introduction, background, problem statement, aim, objectives, significance and definitions of key concepts.

The following chapter, Chapter 2, presents a literature review on MHL among undergraduate nursing students.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

The purpose of this literature review is to discuss the MHL of undergraduate nursing students, specifically their knowledge on mental illness and their attitudes towards recognition of mental disorders and help-seeking. The literature searched included the following databases: EBScohost, CINAHL, MEDLINE, Wiley Online Library, Taylor & Francis Online, ScienceDirect, PubMed and SAGE Journals Online. The following keywords were used to conduct a literature search: undergraduate nursing students or nursing students or student nurses, MHL, mental illness or mental disorder, knowledge, attitudes, recognition of mental disorders, help-seeking behaviours.

The purpose of a literature review is to conduct a critical, analytical appraisal of recent scholarly work on the topic in order to determine what is already known (Brink, Van der Walt & Van Rensburg, 2012). The researcher, therefore, conducted a literature review to identify what was already known about MHL in the general population (to provide some context) and in nursing students. The literature reviewed focuses on the concepts of MHL, nursing students' knowledge of mental illness and their attitudes that promote recognition and appropriate help-seeking.

2.2. Definition of mental health literacy

Jorm (2000) introduced the term 'mental health literacy' in 1997, and defined it as knowledge and beliefs about mental disorders that facilitate the recognition, treatment or prevention thereof. MHL has also been defined as the ability to access, comprehend and utilise information in a manner that promotes and maintains good health (Jorm, 2000).

MHL has six attributes, viz. knowledge of mental disorders, knowledge of how to seek mental health information, knowledge of causes and risk factors, knowledge of self-help treatments, knowledge of professional treatment available, attitudes that promote recognition of mental disorders and appropriate help-seeking (O'Connor & Casey, 2015a).

2.3. Nursing students' knowledge of mental illness

In Australia, McCann et al. (2009) conducted a three-year longitudinal study of 232 Bachelor of Nursing students (including first-, second- and third-year nursing students), investigating their MHL regarding the effectiveness of treatment for schizophrenia. The research tool employed was the Attitudes and Beliefs about Mental Health Problems: Professional and Public Views questionnaire. The results of the study revealed a significant and positive improvement in the students' perception of the helpfulness of interventions for schizophrenia as they progressed through the course, with third-year students obtaining the highest overall mean score, followed by second-year, then first-year students (McCann et al., 2009). The study found that at the start of the course, students have MHL levels comparable to the public in that they had lay perceptions of the effectiveness of treatment interventions for people with schizophrenia. There were no significant differences in MHL for first and second year; however, in third year, after theoretical and clinical learning, there was a notable increase in their MHL.

Liu (2019) conducted a descriptive cross-sectional study comparing two groups of final-year nursing students enrolled in a four-year undergraduate programme – 150 students doing clinical placement at a psychiatric hospital in China and 155 students from a nursing school in the United States of America. Data collection was conducted after both groups of students had

completed theory and had exposure to psychiatric clinic placement. The research tool used in the study was the Australian National Mental Health Literacy Survey instrument developed by Jorm et al. (1997). The aim of the study was to investigate the nursing students' recognition of depression and schizophrenia and their beliefs about the causes of these mental disorders, and to compare the results between the two groups of students. Lui (2019) used Jorm's (2000) concept of MHL to conceptualise the issues of recognition of mental disorders and beliefs about their causes, also adding that correct recognition of mental disorders and correct understanding of their causes can lead to early detection and subsequently early treatment and improved attitudes towards mental illness. The results of the study found that the majority of the students were able to correctly identify depression and schizophrenia. However, students were allowed to select single or multiple responses for correct recognition of the disorders. More American students selected multiple diagnostic options for both disorders and more Chinese students selected only the single correct diagnosis. For the depression vignette, more American students selected depression along with other diagnostic options, predominantly including stress and emotional symptoms. American students were more likely to incorrectly identify schizophrenia as depression and choose multiple diagnostic options, including emotional symptoms, stress and poor self-esteem. A small number of students from both groups identified schizophrenia as ghost possession. Liu (2019) found that although the majority of nursing students participating in the study were able to correctly identify depression and schizophrenia, there was a need to improve their knowledge on correctly identifying symptoms of mental disorders. The researchers identified a need for improved knowledge on causative factors of mental disorders, specifically among Chinese students, who favoured personal weaknesses and family and childhood problems as causes for mental illness (Liu, 2019).

In Nepal, Shrestha (2013) conducted a study with 108 second-year proficiency certificate level nursing students at a psychiatric hospital. The students had completed mental health theory prior to their placement at the psychiatric hospital. The aim of the study was to determine the knowledge and attitudes of proficiency certificate level nursing students in Nepal regarding mental illness, and it found that the majority of the nursing students had good knowledge on the aetiology, psychosocial causes, and effective treatment available for mental illness.

Seow et al. (2017) conducted a study with 500 nursing students enrolled at four nursing institutions in Singapore. Vignettes for dementia, alcohol abuse/dependence, obsessive compulsive disorder, schizophrenia and depression were used to collect data. The aim of the study was to determine correct recognition rates and continuum beliefs of the five conditions, the correlates of correct recognition, the correlates of continuum belief and the relationship between continuum belief and non-identification of mental illness among nursing students. The results revealed that nursing students had better knowledge on recognition of mental disorders as compared to the general population in Singapore. The majority of nursing students were able to correctly identify dementia, alcohol abuse, obsessive compulsive disorder and depression; however, only 46% correctly identified schizophrenia and about a quarter of the students incorrectly identified alcohol abuse as depression (Seow et al., 2017). Additionally, there was no significance associated with correctly identifying a disorder in terms of year level or psychiatric clinical placement (Seow et al., 2017). The researchers concluded that there is a need for further education and training to increase the MHL of nursing students (Seow et al., 2017).

There are varied reports on student nurses' knowledge of mental illness. Literature alludes to students being aware of some aspects related to mental illness, with differences according to country.

There is a paucity of literature on nursing students' knowledge of where to seek information on mental illness; however, there is research available of this in other health student and university student populations. Research conducted by Marwood and Hearn (2019) among medical students in the UK using the MHLS found a significant difference in mean scores of knowledge of where to seek information about mental illness, with greater knowledge being associated with a higher year of study. Schuck (2018) found that college students in the United States had above average knowledge of where to seek information on mental illness but identified a need for improvement. Schuck (2018) suggested that educational programmes may be helpful to assist students with how and where to seek information, as well as future research to explore the reasons students are not confident seeking information and what resources would be more helpful for students to get access to information on mental illness. Gorczynski et al. (2017) conducted research with university students in the UK which revealed that students were generally knowledgeable on where to seek information on mental illness and that most students indicated knowing how to access information on mental illness online.

2.4. Attitudes that promote recognition and appropriate help-seeking

In the United States, Bekhet et al. (2017) conducted an exploratory, qualitative study with 64 undergraduate sophomore nursing students on the first day of their mental health theory class and prior to any exposure to mental health theories at university. The aim of the study was to describe the perceptions and attitudes of nursing students who have not had any exposure to mental health. The results of the study were described in three categories: (1) students'

perceptions of causes of stigma against mental illness, (2) students' perception of mental illness and (3) students' perception on how to break the cycle of stigma against mental illness. The study found that many students thought that fear and lack of knowledge of mental illness, behaviour that was not socially acceptable or "normal", negative portrayal of mental illness in the media, lack of presentation of physical of symptoms like physical illnesses and the inaccurate belief that people have control over mental illness and can will themselves to be better were all causative factors of stigma against mental illness. The students generally maintained positive attitudes towards mental illness, endorsing the belief that mental illness is similar to physical illness and can be managed with treatment, that people should be more accepting of mental illness as it is common and that more efforts should be made to educate people on mental illness to enable them to be help people suffering from mental illness. However, the students indicated that they have insufficient knowledge of mental illness, and thus feel uncomfortable and don't know how to interact with people with mental illness and choose to avoid them as a result. One student said that they thought that mental illness is sometimes used as an excuse. The students thought that raising awareness, encouraging acceptance and better betrayal of mental illness in the media could break the cycle of stigma.

In Indonesia, Sari and Yuliasuti (2018) conducted a cross-sectional study with a correlational design with 317 nursing students, including first-, second- and fourth-year students, at a state university in Indonesia. The researchers employed the Community Attitude Toward the Mentally Ill and Mental Health Knowledge Schedule questionnaires to collect data. The aim of the study was to examine factors that influence attitudes towards mental illness among nursing students in Indonesia. The results of the study indicated that nursing students' attitudes towards mental illness were significantly associated with age, year of study, knowing or having direct contact with someone with a mental illness and knowledge about mental illness.

According to Sari and Yuliastuti (2018), year of study has been related to attitudes towards mental illness in various studies. Additionally, year of study determines whether students have been exposed to mental health theory and clinical placement, and both theory and clinical placement have been found to promote positive attitudes towards mental illness among nursing students (Sari & Yuliastuti, 2018). This study also found that poor knowledge influenced negative attitudes towards mental illness (Sari & Yuliastuti, 2018). In contrast, gender, ethnicity, income level, having a mental illness and family history of mental illness were not correlated to attitudes.

Samari et al. (2018) conducted a cross-sectional study with 500 nursing students enrolled in a public nursing institution in Singapore to examine the extent of stigma towards mental illness among nursing students as well as the factors that correlate with stigma. The research instrument was a vignette for alcohol abuse, dementia, depression, obsessive compulsive disorder and schizophrenia. The results showed that the students generally maintained a low endorsement of stigmatising attitudes towards people with mental illnesses, but still maintained some negative attitudes (Samari et al., 2018). The study also found that students who had been exposed to clinical placement had significantly more negative attitudes towards mental illness, especially regarding perceived dangerousness and desire to maintain social distance (Samari et al., 2018). Nursing students were significantly more likely to perceive a person with depression or alcohol abuse as weak, rather than sick, compared to the vignette for schizophrenia; however, they gave significantly lower scores on dangerousness and unpredictability to depression and obsessive compulsive disorder when compared to schizophrenia (Samari et al., 2018).

Sreeraj et al. (2017) conducted a study with 100 nursing students from various nursing colleges in four states in India. The study was conducted on their first day of clinical placement at a tertiary psychiatric institution. The research instruments used in the study were the Attitude Scale for Mental Illness and Attitudes to Mental Illness Questionnaire. The aim of the study was to assess the attitudes of nursing students towards mental illness and to compare their attitudes towards different psychiatric, physical and social conditions. The overall results of the study revealed largely negative attitudes towards mental illness and people with mental disorders.

Bennett and Stennett (2015) conducted a study with 143 third-year nursing students enrolled in a Baccalaureate programme in Jamaica, using the Attitudes Towards Acute Mental Health Scale. The study aimed to examine the attitudes of nursing students in Jamaica. It found that nursing students in Jamaica had an overall negative attitude towards mental illness, especially with regard to perceived dangerousness of mentally ill people. The researchers suggested that these negative attitudes may be associated with the cultural and religious beliefs Jamaican people have regarding mental illness.

El-Etreby, Ibrahim and Shahda (2017) conducted a study with 309 nursing students, including first-, second-, third- and fourth-year students, at a university in Egypt. The aim of the study was to determine if there is a difference in stigma towards mental illness among nursing students in different year levels. The study found that, although students maintained some positive attitudes towards mental illness, stigma among nursing students is still common. Furthermore, the researchers determined that there is no significant difference in the degree of stigma towards people with mental illness in terms of level of study.

Poreddi et al. (2014) conducted a study with 148 first- and second-year nursing students, enrolled in nursing colleges in India using the Attitude Scale for Mental Illness to investigate the attitudes of nursing students towards mental illness in India. The study found that nursing students participating in this study had positive and negative attitudes towards mental illness.

A separate study in India was conducted by Sharma et al. (2018) with 220 undergraduate nursing students in their first to fourth years of study. It was a cross-sectional study that aimed to examine the attitudes of undergraduate nursing students towards mental illness using the Attitude Scale for Mental Illness. The results of the study revealed that students had predominantly positive attitudes but still maintained some negative attitudes towards mental illness. They had significant positive attitudes towards mental illness in five of the six attitude factors examined in the study, which were restrictiveness, benevolence, stigmatisation, separatism and stereotype, but maintained negative attitudes towards mental illness in the pessimistic prediction attitude factor.

Chang et al. (2017) conducted a cross-sectional study with 500 nursing and 502 medical students with Singaporean citizenship enrolled in public nursing and medical educational programmes in Singapore. The aim of the study was to add to the current understanding of nursing and medical students' attitudes towards mental illness by investigating and comparing students' responses to the Opening Minds Stigma Scale for Health Care Providers scale and assessing the relationship of sociodemographic and education factors to their scores on the scale. The results of the study revealed that the majority of both groups of students maintain generally positive attitudes towards mental illness and a desire for social distance from people with mental illness; however, the students maintained some negative attitudes. Less than one third of the nursing students indicated that they would not consider themselves as weak if they

had a mental illness and if they could not get better on their own. The study found that nursing students were of the opinion that there is not much nurses can do for mentally ill patients and that many mentally ill patients are not trying hard enough to get better (Chang et al., 2017). The researchers reported that some students who had sought professional help had reported that they were stigmatised by the health care providers, which consequently became a barrier to seeking treatment and recovering (Chang et al., 2017). This study also found that, of the nursing students, 27% reported that they would be hesitant to seek help if they had a mental illness, 44,4% said that they would be hesitant to disclose receiving treatment for a mental illness to a colleague and 28% agreed that they would disclose to a friend if they had a mental illness (Chang et al., 2017).

A separate cross-sectional study was conducted by Picco et al. (2018) with 500 nursing and 502 medical students, in varying years of study, in Singapore. The participants were all Singaporean citizens and were recruited from four nursing institutions and two medical schools in Singapore. The aim of the study was to investigate the beliefs of nursing and medical students regarding help-seeking, treatment options and expected treatment outcomes using a vignette-based instrument that described one of five mental disorders, namely alcohol abuse, obsessive compulsive disorder, schizophrenia, depression and dementia. The study found that, across the vignettes, students most frequently recommended seeing a psychiatrist for help, although this varied depending on the type of mental disorder. More than 50% of the students recommended seeing a psychiatrist for treatment for obsessive compulsive disorder and schizophrenia, while 35,5%, 34,4% and 39,5% recommended seeing a psychiatrist for alcohol abuse, dementia and depression respectively (Picco et al., 2018). In addition, students were more likely to recommend informal sources of help for depression, alcohol abuse and dementia (Picco et al., 2018). When asked to rate the helpfulness of interventions for these mental

disorders, the vast majority of students indicated that treatment from a psychiatrist, psychologist and licensed professional counsellor, as well as using psychotropic medication, would be the most helpful interventions for certain disorders. When asked about the prognosis of these mental disorders with and without professional help, 50,2% of students indicated that full recovery with a recurrence of problems in future is likely, while 81,5% of students indicated that the persons in the vignette would likely become worse if no professional help was sought.

Liu, Li and Peng (2018) conducted a descriptive comparative study using a cross-sectional survey to explore the attitudes of nursing students towards people with mental illnesses in the context of American and Chinese culture, including 150 Americans at an American school of nursing and 155 Chinese students at a large psychiatric hospital, while completing their clinical placement. At the time of data collection, both groups of students had undergone theory and clinical placement. The conceptual framework was based on the aspect of Jorm's definition of MHL regarding attitudes that promote appropriate help-seeking behaviour to improve mental health. The research instrument employed was a survey questionnaire developed by Jorm et al. (1997), and consisted of two vignettes, one for depression and one for schizophrenia. The results of the study indicated that a majority of the students in both countries agreed that the person in both vignettes needed professional help and would be able to recover with professional help, although they thought that the problem would reoccur. Both groups of students were also pessimistic about the prognosis without professional help. The Chinese students were more pessimistic about the prognosis, with and without professional help, for both vignettes, as more Chinese than American students indicated that a reoccurrence after treatment is likely, and that the condition would worsen if treatment is not sought. The Chinese

students also maintained more negative attitudes regarding the long-term outcome for the person in both vignettes.

2.5. Summary

Enhancing the MHL of undergraduate nursing students is important because it promotes positive attitudes towards mental illness, even after graduation, thus enhancing the patient care they provide (Crawford et al., 2015). In addition, there is a need to promote the prevention of mental illness, and if nursing students have good MHL, they can use this knowledge to inform others on how to reduce their own and others' risk of developing mental illnesses (Jorm et al., 2006).



CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

This chapter presents a description of the research methodology employed in this study. Polit and Beck (2010) define research methodology as the procedures used to structure a research study, and the techniques employed to gather and analyse data in a systematic manner. The research methodology is described and discussed under the following subheadings: research approach, research design, research setting, population and sample, data collection process, data analysis and ethics.

3.2. Research approach

Creswell (2014) defines the research approach as the plans and procedures followed by the researcher, including broad assumptions to detailed methods of data collection, analysis and interpretation. For the purpose of this study, a quantitative research approach was employed. Polit and Beck (2010) define quantitative research as the investigation of phenomena that are able to be accurately measured and quantified, often involving rigorous and controlled designs.

3.3. Research design

A research design may be defined as a set of logical steps taken by the researcher to answer the research question, and is determined by the purpose of the research study (Brink et al., 2012). A quantitative, descriptive survey design was employed to achieve the aim of this study. This type of design is used to numerically describe variables of a specific population (Creswell, 2014) and does not manipulate variables or determine relationships between variables (Brink et al., 2012). Therefore, this design was chosen to describe the students' knowledge and

attitudes numerically, as these variables naturally occur in this population and with no control over the setting.

3.4. Research setting

The research setting is the specific physical place or location where, and the conditions under which, data are collected in a research study (Polit & Beck, 2010). The research setting is selected based on the research question and the type of data required to achieve the aim of the study (Brink et al., 2012). For the purpose of this study, a natural setting was selected. A natural setting is defined as an “uncontrolled, real-life situation or environment” (Brink et al., 2012:59). A natural setting was selected as this is a non-experimental, descriptive study and the researcher had no intention to manipulate the environment.

The research setting for this study is a residential, public university situated in Bellville, an urban suburb in Cape Town in the Western Cape. The university was established in 1960, during the apartheid era under the Extension of the University Education Act, 1959, and was originally intended for Coloured people only. The university is now a multiracial and co-educational institution. It is one of four universities in the Western Cape and the smallest of these (Career Wise, 2017) with over 20 000 students and staff (Kruger, n.d.).

The School of Nursing (SoN) is a division of the Faculty of Community and Health Sciences. The SoN is the largest residential nursing school in South Africa and offers both undergraduate and postgraduate nursing programmes, including Master of Nursing and Doctor of Philosophy degrees. The SoN offers both a four-year curriculum and an extended curriculum programme of five years in the Bachelor of Nursing programme. The mental health aspects of the Bachelor of Nursing curriculum are taught as an introductory mental health module in the second year

of study and two modules of psychiatric nursing science in the fourth year. There is also a 600-hour psychiatric clinical requirement completed in the fourth year. On completion of the programme, the student is registered with the South African Nursing Council as a general nurse, midwife, community health nurse and a psychiatric nurse.

3.5. Population and sample

In this section, the study population, sampling method, sample and sample size will be discussed.

3.5.1. Study population

The population refers to the entire group of people who are of interest to the researcher (Brink et al., 2012) or every individual who fits the criteria the researcher has set for the participants of the proposed study (Brink et al., 2012; Given, 2008). The target population refers to the entire set of elements, or group of individuals, about which the researcher intends to generalise (Brink et al., 2012). The accessible population, also referred to as the study population, may be defined as the population that to which the researcher has reasonable access (Brink et al., 2012); it is a subset of the target population and forms the sampling frame for the study (UMSL, n.d.). The study population will comprise undergraduate nursing students enrolled in the Bachelor of Nursing degree at a university in the Western Cape, South Africa. The population size is 1 162 (N=1162), constituting 392 first-year, 314 second-year, 260 third-year and 196 fourth-year undergraduate nursing students. For the purpose of this study, the first-year category comprises first-year students (269), as well as students in foundation programme year 1 (65) and foundation programme year 2 (58).

3.5.2. Sampling and sample size

A sample is defined as a subset of population elements (Polit & Beck, 2010), or a part of a whole set of elements or individuals, selected by the researcher to participate in the study (Brink et al., 2012). Sampling is the process of selecting a sample from the study population that is representative of that population so that the data obtained from the sample will be generalisable to the population (Brink et al., 2012). The researcher employed stratified random sampling, with year of study being the chosen stratification. Stratified random sampling is a probability sampling technique in which the population is divided into subgroups, or strata, according to a specific variable, and a sample is selected from each stratum (Brink et al., 2012). In addition, the researcher ensures that each stratum size is represented in the same proportion that they occur in the population to ensure a proportionate sample (Brink et al., 2012).

An online sample calculator, namely the Flex^{MR} sample size calculator, was used to determine the sample size for the study. The sample calculator uses the values for the confidence level, confidence interval and population size to calculate the sample size. The confidence level is the statistical probability that the value of a population parameter lies within a specified confidence interval, also known as the margin of error, which is the range of values within which a population parameter is estimated to lie (Polit & Beck, 2010). A confidence level of 95%, confidence interval of 5% and population size of 1 162 were inserted into the calculator and a sample size of 289 ($n=289$) was obtained (see Table 3.1).

Given that 289 was 24,87% of 1 162, the sample size for each of the four strata was calculated at 24,87% of the population per year level. Therefore, the sample taken from each stratum consists of 24,87% of its population, thus ensuring that each stratum is represented in the same

portion as it occurs in the population and the sample is proportionate. The sample size is presented in Table 3.1 below.

Table 3.1: Sample size per stratum

| Year level per stratum | Population per year level | Sample size |
|-------------------------------|----------------------------------|--------------------|
| Year 1 | 392 | 97 |
| Year 2 | 314 | 78 |
| Year 3 | 260 | 65 |
| Year 4 | 196 | 49 |
| Total | 1 162 | 289 |

3.5.3. Inclusion criteria

Inclusion criteria may be defined as the characteristics that participants must have to be eligible to participate in a research study (Statistics Solutions, n.d.).

The inclusion criterion for this study was all undergraduate nursing students enrolled in the Bachelor of Nursing degree at the selected university in the current academic year; that is all foundation year 1 and year 2, first-year, second-year, third-year and fourth-year nursing students.

3.5.4. Exclusion criteria

Exclusion criteria is defined as characteristics that potential participants have that disqualify them from participating in the research study (Statistics Solutions, n.d.).

There were no exclusion criteria.

3.6. Data collection

Data collection is a process that entails a standardised systematic approach to gathering and measuring data regarding variables of interest to the researcher, in order to answer research questions, test hypotheses and evaluate the outcomes of a research study.

3.6.1. Data collection instrument

A data collection instrument is defined as the device or tool the researcher uses to collect data in a research study. The data collection instrument employed in this study is a structured questionnaire, which is a self-report data collection technique in which the participants answer questions posed by the researcher about the study variables directly (Brink et al., 2012; Polit & Beck, 2010). With structured questionnaires, participants are presented with the same questions in the same order, and the questionnaire often consists only of closed-ended questions (Polit & Beck, 2010).

The instrument employed in the study was a 41-item structured questionnaire. It consists of two sections, Section A is a six-item demographic data tool and Section B is a 35-item Likert scale tool, namely the MHLS. A Likert scale is a summative rating scale typically used to indicate attitudes or feelings and consists of declarative statements with an option of five or seven responses per statement, usually ranging from “strongly agree” to “strongly disagree” (Brink et al., 2012). The questionnaire took an average of 15 minutes to complete.

The MHLS was developed by O’Connor and Casey in 2015. The aim was to develop a psychometrically and methodologically robust and time-efficient measure to assess an individual or population’s MHL that includes all of the attributes of the concept of MHL (O’Connor & Casey, 2015a). The MHLS is the first scale-based measure to include all of these

attributes (O'Connor & Casey, 2015a). Prior to the development of the MHLS, the most commonly used instruments to measure MHL were vignette-based. Although a few scale-based measures existed, only limited psychometric data were reported (O'Connor & Casey, 2015a).

Permission to use the MHLS for this study was granted by author O'Connor on 21 March 2018. The instrument was made available at no cost. The author did not stipulate a limit on how many questionnaires the researcher is allowed to use or a time period within which to use it. The author did not provide a manual or scoring guideline to interpret the results, as none was established by the authors, and suggested that it is up to the researcher's discretion. None of the researchers that have used the MHLS have developed a scoring system for the scale as yet (Vermaas, 2016). Vermaas (2016) suggests that future research should consider establishing a score range to measure MHL according to overall averages and score range per construct. Vermaas (2016) and Schuck (2018) have compared the means of the overall MHL score to the means obtained by O'Connor and Casey (2015a) in the pilot testing of the MHLS. These researchers have associated a higher mean with a higher level of MHL.

Section A consisted of six questions relating to the demographic data of the participants. The following demographic variables were included in this section: age, year of study, gender, race, religion and whether the participants had previous experience as a mental health care provider. Brink et al. (2012) define demographic variables as the characteristics of the participants, such as age and level of education. The participants were required to indicate their answers by writing their age in the space provided and select the relevant response from the options provided by ticking or marking with a cross.

Section B comprises two domains to measure MHL. Domain 1 has 19 items measuring knowledge, organised as follows: eight questions (items 1–8) relating to participants’ ability to recognise specific disorders, two questions (items 9–10) relating to knowledge of risk factors or causes, two questions (items 11–12) relating to knowledge of self-treatment, three questions (items 13–15) relating to knowledge of professional help available and four questions (items 16–19) relating to knowledge of where to seek mental health information (O’Connor & Casey, 2015a). Domain 2 has 16 items measuring attitudes that promote recognition of mental disorders and appropriate help-seeking behaviour: three questions (items 26–28) relating to appropriate help-seeking behaviour and 13 questions (items 20–25 and items 29–35) relating to recognition of mental disorders (O’Connor & Casey, 2015a). Items 1 to 15 were rated on a four-point scale ranging from “very unlikely” to “very likely”, items 16 to 28 were rated on a five-point scale from “strongly disagree” to “strongly agree”, and items 29 to 35 were rated on a five-point scale from “definitely unwilling” to “definitely willing”. The total score is produced by summing all the scores obtained for each answer. Items 10, 12, 15 and 20–28 are reverse-scored, and were recoded during data analysis. The maximum score is 160 and the minimum score is 35 (O’Connor & Casey, 2015b).

3.6.2. Validity

Validity is defined as the ability of an instrument to accurately measure the variables it is intended to measure (Brink et al., 2012). The researcher used face validity and content validity to ascertain the validity of the questionnaire used in this study. Face validity is a subjective determination made by an expert in the field that an instrument appears to be a sufficient means to obtain the desired information (Brink et al., 2012). For this study, face validity was obtained by presenting the questionnaire to nursing research experts and the research supervisor to ascertain whether the questionnaire appeared to measure what it should. Content validity is a

determination of whether the questions are relevant to and representative of the phenomenon under study and whether it includes all of the components of the variables being measured (Brink et al., 2012). Literature states that the components of MHL include (a) the ability to identify mental disorders, (b) knowledge of how to seek mental health information, (c) awareness of associated risk factors and causes, (d) awareness of self-treatments, (e) knowledge of available professional help and (f) attitudes that encourage recognition and appropriate help seeking (O'Connor & Casey, 2015a). The MHLS incorporates each of these components, and therefore has good content validity. In addition, the questions were directly linked to the objectives of the study as seen in table 3.2 below.

Table 3.2: Validity of the MHLS

| Objectives | Questions |
|--|--------------------|
| 1. Determine undergraduate nursing students' knowledge of mental illness | Questions 1 to 19 |
| 2. Determine undergraduate nursing students' attitudes that promote recognition of mental disorders and help-seeking | Questions 20 to 35 |

Table 3.2 illustrates that objective 1 was answered by questions 1 to 19 and objective 2 was answered by questions 20 to 35. Furthermore, a pre-test was conducted with eight participants (two per year level), to determine whether the questionnaire is able to provide the information the researcher intends to measure in this study population.

3.6.3. Reliability

The reliability of an instrument is represented by its consistency and accuracy in measuring a variable (Polit & Beck, 2010). Internal consistency is an aspect of instrument reliability that concerns the extent to which the items on an instrument all measure the same variable (Polit & Beck, 2010). Cronbach's alpha coefficient is a frequently used statistical test to determine the

internal consistency of structured quantitative questionnaires (Brink et al., 2012). Normal values for Cronbach's alpha range between .00 to +1.00, with a higher value indicating a higher level of internal consistency (Polit & Beck, 2010). In this study, internal consistency was used to determine the reliability of the instrument.

According to a review done by Wei et al. (2016), the tool presented consistent findings in multiple studies that were of good methodological quality, or in at least one study that was of excellent methodological quality; thus, the tool has good internal consistency. The MHLS was used by O'Connor and Casey in one study in which the participants were mental health professionals and a separate study in which the participants were a community sample of female first-year university students undertaking a psychology course (O'Connor & Casey, 2015a). Both of these studies were conducted in 2015 and were part of the process of establishing the psychometric properties of the scale. A Cronbach's alpha of 0.873 was obtained (O'Connor & Casey, 2015a). Studies using the MHLS conducted by Vermaas (2016), Gorczyński et al. (2017), Schuck (2018) and Marwood and Hearn (2019) obtained Cronbach's alpha values of 0.85, 0.839, 0.88 and 0.842 respectively. The Cronbach's alpha for the current study was 0.807.

3.6.4. Data collection process

Prior to commencing data collection, ethics approval was applied for and obtained from the Humanities and Social Sciences Research Ethics Committee (HSSREC) of the University of the Western Cape. Thereafter, permission to conduct the study using student participants was obtained from the registrar of the selected university. Permission to access the students was obtained from the Head of the SoN. The researcher then made appointments with the relevant

year level coordinators of the undergraduate nursing programme to explain the study and gain access to the students.

Prior to making arrangements to collect data from students, the researcher requested permission from the clinical coordinators to have access to students to participate in a pre-test. Two students per year level were requested to complete a pre-test and were willing to do so in their personal time at the university campus so as not to disrupt the rest of the class. The researcher and research assistant waited as students completed the questionnaire so as to monitor the time each student required to complete the questionnaire as well as to address any questions they may have had. Eight questionnaires were completed for the pre-test. The students required approximately 15 minutes to complete the questionnaire. They reported being confused by the sixth demographic question, which is “Do you have previous experience as a mental health care provider?”, and enquired whether practical clinical hours were considered as experience as a mental health care provider. As a result, an explanation was added to the question in the final draft of the questionnaire to ensure clarity of the question. After the pre-test was completed, the questionnaires were handed over to a statistician to evaluate and identify possible concerns that may arise during data analysis in order for the questionnaire to be adjusted accordingly. However, it was not necessary for the questionnaire to be adjusted. The students who participated in the pre-test were not included in the formal data collection process.

Once the pre-test process was completed, the researcher negotiated with the coordinators to arrange an appropriate date, time and venue for the researcher to explain the study to the students and give information sheets to the potential participants. The researcher also requested that the coordinators and relevant lecturers set aside 20 minutes, either at the start or at the end of the period (whichever the lecturer and students prefer), in which to allow the participants to

complete the questionnaire. The date and time were arranged before the researcher visited to ensure that the process of data collection did not disrupt the class.

On the dates and times as decided, the researcher met with the participants at their respective venues to disseminate the questionnaire and consent form. The researcher explained the study, the information sheet and the consent form to the participants and then issued them with the information sheet and consent form. The researcher prepared two separate boxes, one in which to place the consent form and the other in which to place the questionnaire. Once the participants had completed the questionnaires and consent forms, the researcher and a research assistant collected them and checked the number of consent forms against the number of completed questionnaires to ensure that each participant had handed back both items. The researcher and assistant had put the questionnaires and consent forms into their allocated boxes. This was done to ensure confidentiality and anonymity.

3.7. Data analysis

The data were analysed using the IBM Statistical Package for the Social Sciences (SPSS) Statistics version 25 computer software. Once the data collection process was complete, the researcher sorted the questionnaires by grouping them according to year level and numbered each questionnaire. This was done to identify each questionnaire and to avoid capturing the same data more than once. The researcher developed a codebook in which each variable was assigned a code by which it would be captured when entering data in SPSS. A statistician was then consulted to assist the researcher with the process of analysing the data. Accuracy of the data set was ensured by systematically uploading each question to SPSS and coding the answers according to the codebook. After entering the answers into SPSS, the reverse-scored

questions were recoded according to the coding instructions in the codebook. The data were checked for errors and cleaned before being analysed in SPSS.

The researcher used descriptive statistics, including frequencies, means and standard deviation, to describe the data. The tests used were the ANOVA and chi-squared tests; both these tests were used to determine whether there were any statistically significant differences in the results among the four groups of students.

3.8. Ethics

Permission to utilise the students as research participants was obtained from the registrar of the university. Ethical clearance to conduct this study was obtained from the HSSREC of the University of the Western Cape. Permission to conduct the study was granted by the registrar of the University of the Western Cape.

Brink et al. (2012) identify three fundamental ethical principles that should guide researchers to ensure that the human rights of the participants are protected during the research process. The application of these ethical principles in this study is discussed below.

3.8.1. Principle of respect for persons

This principle is concerned with acknowledging that people are autonomous individuals and aims to protect their human right to self-determination (Brink et al., 2012). To ensure that this principle was upheld, the researcher ensured that each participant had been given an information sheet and that the research study, ethical considerations and guidelines for participating in the study were explained to them at their level of understanding. The researcher also answered any questions the participants had to ensure their clarity. Thereafter, the

researcher explained to them that their participation in the study is voluntary and the participants were given consent forms to sign. This was done to ensure informed consent. The students were informed that they may withdraw from the study at any time without reason or any consequences. The researcher also explained to the students that participating in the study is not a course requirement. The participants were requested to sign a consent form after agreeing to participate in the study and before completing the questionnaire.

3.8.2. Principle of beneficence

To ensure this principle, the researcher needs to ensure that the well-being of the participants, inclusive of their right to protection from harm – be it physical, emotional, psychological or legal – is protected throughout the research process (Brink et al., 2012). As all research carries some risk, the researcher was prepared to refer students to a counsellor at the university, which had been prearranged by the researcher, should any emotional or psychological distress occur as a result of partaking in the study. Furthermore, the university will be protected by not disclosing the name of the university the participants or researcher belong to in any report or publication of this research study, so as to prevent harm to the reputation of the university. There were no incidents observed by or reported to the researcher of any participants' suffering any harm during data collection.

3.8.3. Principle of justice

The principle of justice aims to ensure that the participants' rights to fair selection and treatment, privacy, and anonymity and confidentiality are protected (Brink et al., 2012). The participants' right to fair treatment was ensured as all participants were selected in accordance with the methodology and aim of the study, ensuring that participants were selected equally. Participants did not receive any benefit from participating in the study and no benefits were

withheld from students who did not participate. Furthermore, participants were treated with respect, as the researcher respected their time and availability and did not keep them for longer than needed. In addition, the participants were thanked for their willingness to participate in the study. The participants' right to privacy was protected as no data were collected without the participants' knowledge or permission, and the data were not used for any purpose other than what was explained to the participants, to which they voluntarily consented. The data collected were only shared and discussed with the research supervisor and statistician, as they were directly involved in the study. The participants' right to confidentiality and anonymity was ensured as participants were not expected to, and were informed that they should not, provide their name on the questionnaire; thus, the identities of the participants are protected and there is no way of linking their questionnaire to their consent form, as these were collected separately and placed in separate boxes during data collection. Furthermore, each participant was identified with a number during data analysis.

Questionnaires will be kept in a locked drawer for a period of five years, after which they will be discarded by means of shredding. Electronic data will be stored on the university server in a password-protected file, as well as on a USB drive. Data stored on the USB drive will be encrypted to prevent information from being shared during data transfer. The USB drive will be locked with paper data in a filing cabinet. The data are the property of the university and will only be disseminated should the research be used for a paper publication.

3.9. Summary

In this chapter, the research approach, research design, research setting, population and sampling method, data collection process, data analysis process and ethics considerations employed in this research study were discussed and described.

CHAPTER FOUR: RESEARCH FINDINGS

4.1. Introduction

The purpose of the study was to determine the MHL of undergraduate nursing students at a university in the Western Cape, South Africa. The results of this study are presented in two domains based on the objectives:

- To determine undergraduate nursing students' knowledge of mental illness.
- To determine undergraduate nursing students' attitudes that promote the recognition of mental disorders and appropriate help-seeking behaviour.

This chapter describes the sample realisation and a description of the respondents. It also includes a description of the results, which are described in two domains. Domain 1 describes the knowledge of mental illness (objective 1); domain 2 describes the attitudes that promote the recognition of mental disorders and appropriate help-seeking (objective 2).

4.2. Sample realisation

The population of the study comprised all the undergraduate nursing students at a selected university in the Western Cape, South Africa. At the time of the survey, there were 1 162 undergraduate nursing students enrolled in this university, with 392 being enrolled in year 1, 314 in year 2, 260 in year 3 and 196 in year 4. After sampling using the Flex^{MR} sample size calculator, the number 289 (year 1=97, year 2=78, year 3=65 and year 4=49) was obtained as the sample for the study (Figure 4.1).

A total of 294 questionnaires were handed out to the undergraduate nursing students and all questionnaires were completed. Extra questionnaires were issued to prevent a situation where there were fewer participants than the sample size requirement; thus, an additional five

questionnaires were collected (four in first year and one in fourth year), which resulted in a slightly larger sample size participating in the study than was determined by the sample size calculator.

Due to the differences in year levels, the results are presented separately for these groups and differences were tested with a chi-squared test and ANOVA where relevant.

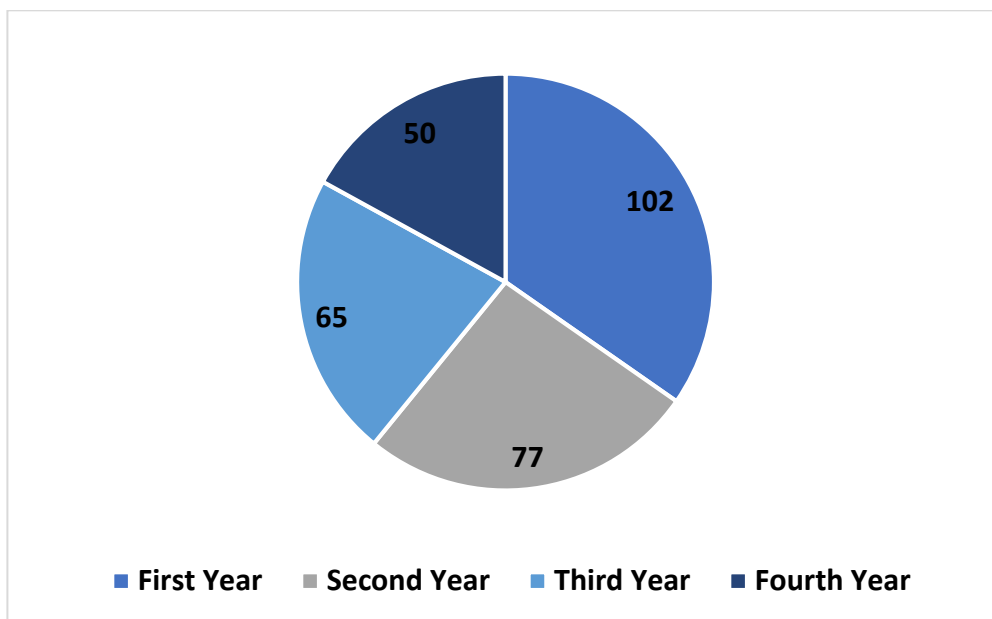


Figure 4.1. Respondents per study year level

Figure 4.1 displays the sample of respondents per year level. The largest portion of the sample consists of first-year students (102, 34,7%), followed by second-year students (77, 26,2%), third-year students (65, 22,1%) and lastly fourth-year students (50, 17%). The percentages of respondents per year level is proportionate to the percentages that the occur in the study population.

4.3. Section One: Demographics of respondents

The section reports on the distribution of the respondents who completed the questionnaire in terms of age, gender, race, religion and previous experience working in mental health care settings. Descriptive statistics in the form of frequency tables and pie graphs were used to describe the sample.

4.3.1. Respondents' age

The mean age of the respondents is 21,7 (3,7) years. There was a significant difference in the mean age among the groups ($F=10,3, <.001^*$), with respondents in year 4 being older ($23\pm 2,6$) years as compared with other groups (Table 4.2).

Table 4.1 depicts the respondents' mean age per year level. The ages of the respondents at the time of data collection ranged from 17 to 38.

Table 4.1: Respondents' mean age per study year

| Demographics | Total (N=294) | Year1 (n=101) | Year 2 (n=78) | Year 3 (n=65) | Year 4 (n=50) | Test | p-value |
|------------------|------------------|------------------|------------------|------------------|------------------|----------|-----------|
| Age m(\pm sd) | 21,7 (3,7) | 20,2 (3,1) | 22,2 (4,5) | 22,5 (3,7) | 23 (2,6) | $F=10.3$ | $<.001^*$ |

4.3.2. Distribution of respondents

The following figure (4.2) shows the gender distribution of the respondents in the study.

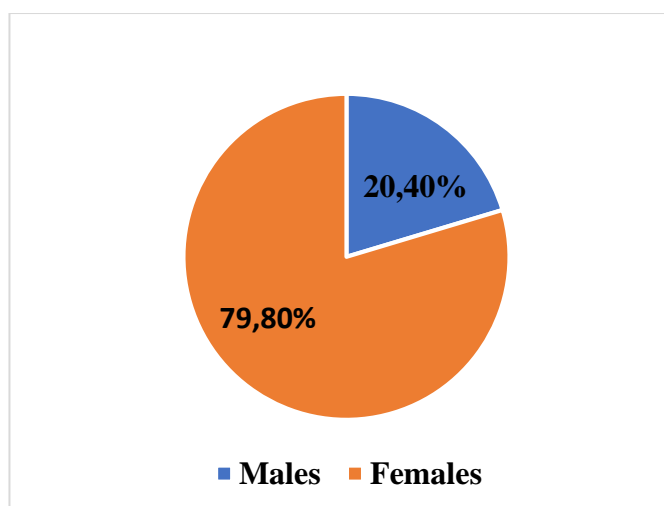


Figure 4.2. Gender of respondents

The majority of the respondents were females (234, 79,6%), with about one-fifth being males (60, 20,4%). This predominance of females was present across the groups, with 79 (77,5%), 59 (76,6%), 54 (83,1%) and 42 (84,0%) being females in years 1, 2, 3 and 4 respectively ($X^2=1,8, p=.617$) (Table 4.1).

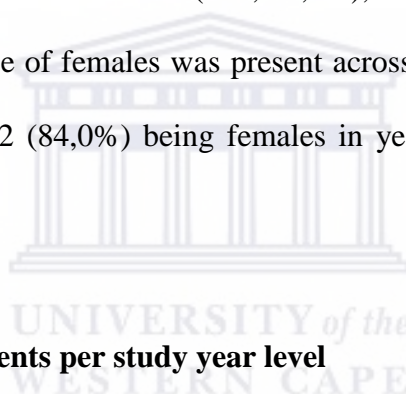


Table 4.2: Gender of respondents per study year level

| Demographics | Total (N=294) | Year1 (n=101) | Year 2 (n=78) | Year 3 (n=65) | Year 4 (n=50) | Test | p-value |
|---------------|------------------|------------------|------------------|------------------|------------------|-----------|---------|
| Gender | (n, %) | (n, %) | (n, %) | (n, %) | (n, %) | | |
| Male | 60 (20,4%) | 23 (22,5%) | 18 (23,4%) | 11 (16,9%) | 8 (16,0%) | $X^2=1,8$ | .617 |
| Female | 234 (79,6%) | 79 (77,5%) | 59 (76,6%) | 54 (83,1%) | 42 (84,0%) | | |

*Chi-squared test (or Fisher Exact Tests where appropriate), ANOVA *Significant at $P<.05$*

4.3.3. Race of respondents

Figure 4.3. depicts the race classification of the respondents.

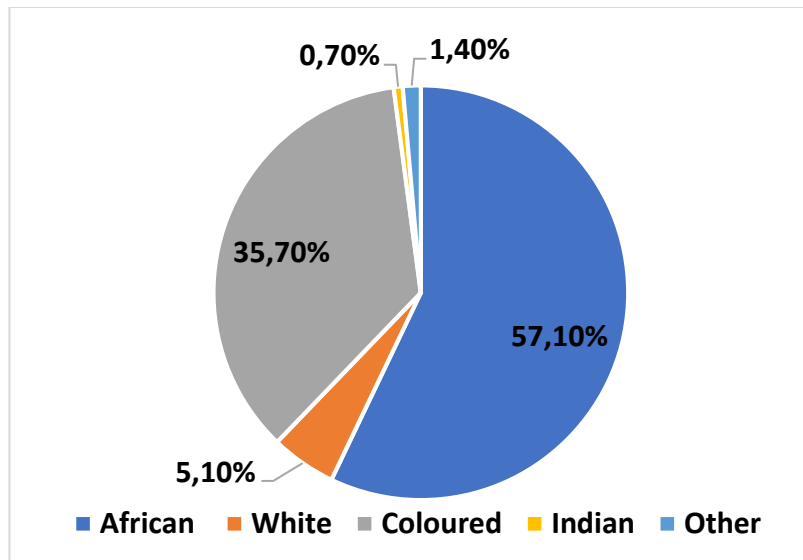


Figure 4.3. Race of respondents

More than half of the respondents are Africans (168, 57,1%), followed by Coloured people (105, 35,7%), with the least being Indian people (2, 0,7%).

4.3.4. Religion of respondents

Figure 4.4 shows the religion of the respondents.

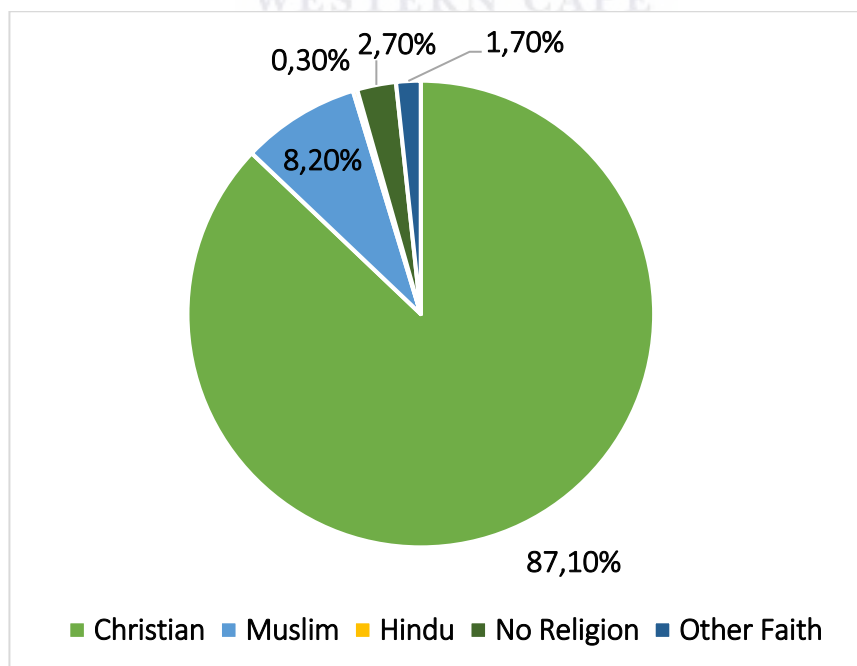


Figure 4.4. Religion of respondents

Most of the respondents are Christians (256, 87,1%), followed by Muslims (24, 8,2%), only one (0.3%) Hindu and eight (2,7%) respondents who reported that they had no religion.

4.3.5. Respondents' previous experience of working in a mental health care setting

Figure 4.5 shows the respondents' previous experience of working in mental health care settings.

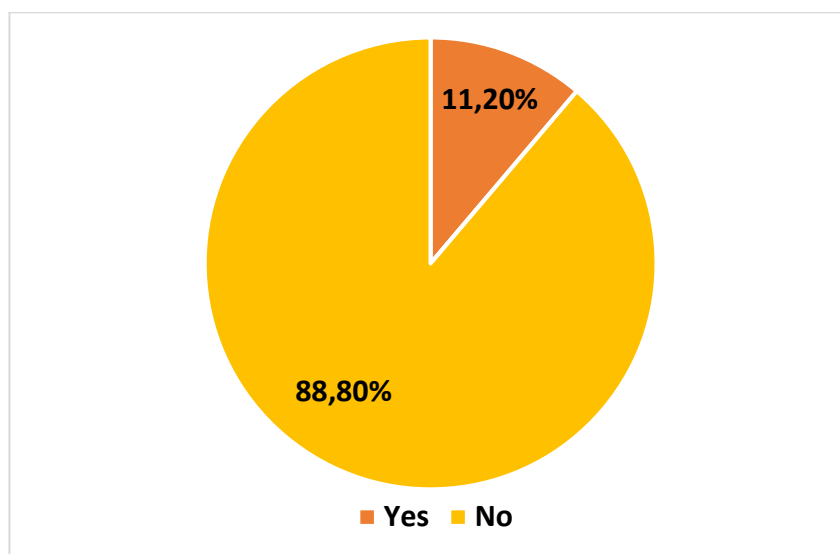


Figure 4.5. Respondents' previous experience in a mental health care setting

As displayed in figure 4.5, the majority (88,8%) of the students had no previous experience as a mental health care provider, while 11,2% of the participants said that they had such experience.

4.4. Section Two: Mental health literacy of undergraduate nursing students

MHL was measured using several constructs based on the MHLS developed by O'Connor & Casey (2015b). Two major components of MHL were measured, namely knowledge of mental disorders, and attitudes that promote recognition of mental disorders and appropriate help-

seeking behaviour. The items comprising the tool were grouped into two domains with scores ranging from “very unlikely” to “very likely”, “strongly disagree” to “strongly agree”, and “definitely unwilling” to “definitely willing”. The domains are (1) knowledge of mental disorders and (2) attitudes that promote recognition of mental disorders and appropriate help-seeking behaviour.

In addition, the results are presented in tables and the items are sequenced in order from highest to lowest average percentage across all year levels per item. However, the items were numbered as they appeared on the instrument.

4.4.1. Domain 1: Knowledge of mental illness

This domain is described in two subdomains, viz. knowledge of mental disorders and knowledge of where to seek mental health information. These items were measured according to two different Likert scales and thus were analysed separately. The subdomains are described below.

4.4.1.1. Domain 1.a). Knowledge of mental disorders

Determining undergraduate nursing students’ knowledge of mental illness was the first objective of the study, and this was measured through respondents’ agreements with a list of items on knowledge of mental illness. In addition, a mean knowledge score was calculated for this subdomain of knowledge (Table 4.3).

The mean score for knowledge of mental disorders was 3,0 ($\pm 0,3$) out of a possible score of 4 [95% CI -3,1–2,9]. Overall, no significant difference was found in the mean knowledge score

between the groups ($F=1,5$, $p=.220$), with the mean knowledge score being 50,2 ($\pm 11,8$) for years 1, 2 and 3, and 52,8 ($\pm 11,1$) for year 4.

Most of the respondents (272, 92,5%) agreed that “it is likely that the diagnosis of Substance Abuse Disorder can include physical and psychological tolerance of the drug”, which indicates that it is the item in which the respondents are most knowledgeable about. This was followed closely by those who agreed with the statement “if someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have Generalised Anxiety Disorder” (267, 90,8%) and those who agreed that “it is likely that Persistent Depressive Disorder (Dysthymia) is a disorder” (267, 90,8%).

“It is likely that the following is a condition that would allow a mental health professional to break confidentiality: if your problem is not life-threatening and they want to assist others to better support you” has the least reported knowledge, with less than half of the respondents disagreeing with the statement (141, 48,1%).

There was no significant difference in the items above. However, more than two thirds of the respondents (230, 78,2%) agreed that “it is likely that Personality Disorders are a category of mental illness”. There was a significant difference between the groups, with 46 (92,0%) of those in year 4 in agreement compared to 66 (64,7%) in year 1, 64 (83,1%) in 2 and 54 (83,1%) in year 3 ($X^2=18,4$, $p<.001^*$) (Table 4.3).

Table 4.3: Knowledge of mental disorders

| Items | Level of agreement | | | | | Test | p-value |
|---|--------------------|---------------|---------------|---------------|---------------|-----------|---------|
| | Total (N=294) | Year1 (n=101) | Year 2 (n=78) | Year 3 (n=65) | Year 4 (n=50) | | |
| 8. To what extent do you think it is likely that the diagnosis of Substance Abuse Disorder can include physical and psychological tolerance of the drug? | 272 (92,5%) | 96 (94,1%) | 68 (88,3%) | 58 (89,2%) | 50 (100,0%) | $X^2=7,4$ | .060 |
| 2.If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have Generalised Anxiety Disorder? | 267 (90,8%) | 90 (88,2%) | 68 (88,3%) | 60 (92,3%) | 49 (98,0%) | $X^2=4,6$ | .198 |
| 5. To what extent do you think it is likely that Persistent Depressive Disorder (Dysthymia) is a disorder? | 267 (90,8%) | 93 (91,2%) | 69 (90,8%) | 55 (85,9%) | 46 (92,0%) | $X^2=1,6$ | .656 |
| 7. To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood? | 261 (88,8%) | 88 (86,3%) | 67 (87,0%) | 58 (89,2%) | 48 (96,0%) | $X^2=3,5$ | .319 |
| 1.If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have Social Phobia? | 260 (88,4%) | 93 (91,2%) | 67 (87,0%) | 55 (84,6%) | 45 (90,0%) | $X^2=1,9$ | .583 |
| 13. To what extent do you think it is likely that Cognitive Behaviour Therapy (CBT) is a therapy based on challenging negative thoughts and increasing helpful behaviours? | 248 (84,4%) | 83 (81,4%) | 62 (80,5%) | 58 (89,2%) | 45 (90,0%) | $X^2=3,9$ | .270 |
| 11. To what extent do you think it would be helpful for someone to improve their quality of sleep if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)? | 241 (82,0%) | 84 (82,4%) | 65 (84,4%) | 52 (80,0%) | 40 (80,0%) | $X^2=0,6$ | .891 |
| 14. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality: If you are at immediate risk of harm to yourself or others? | 238 (81,0%) | 84 (82,4%) | 65 (84,4%) | 51 (78,5%) | 38 (76,0%) | $X^2=1,8$ | .618 |
| 3. If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and | 232 (78,9%) | 80 (78,4%) | 56 (72,7%) | 55 (84,6%) | 41 (82,0%) | $X^2=3,3$ | .342 |

| | | | | | | | |
|--|-------------|------------|------------|------------|------------|------------|--------|
| experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder? | | | | | | | |
| 4. To what extent do you think it is likely that Personality Disorders are a category of mental illness? | 230 (78,2%) | 66 (64,7%) | 64 (83,1%) | 54 (83,1%) | 46 (92,0%) | $X^2=18,4$ | <.001* |
| 6. To what extent do you think it is likely that the diagnosis of Agoraphobia includes anxiety about situations where escape may be difficult or embarrassing? | 220 (74,8%) | 76 (74,5%) | 56 (72,7%) | 53 (81,5%) | 35 (70,0%) | $X^2=2,4$ | .501 |
| 9. To what extent do you think it is likely that in general in South Africa, women are MORE likely to experience a mental illness of any kind compared to men? | 184 (62,6%) | 57 (55,9%) | 52 (67,5%) | 43 (66,2%) | 32 (64,0%) | $X^2=3,2$ | .368 |
| 12. To what extent do you think it would be helpful for someone to avoid all activities or situations that made them feel anxious if they were having difficulties managing their emotions? | 180 (61,2%) | 57 (55,9%) | 48 (62,3%) | 40 (61,5%) | 35 (70,0%) | $X^2=2,9$ | .409 |
| 10. To what extent do you think it is likely that in general, in South Africa, men are MORE likely to experience an anxiety disorder compared to women? | 145 (49,3%) | 45 (44,1%) | 36 (46,8%) | 37 (56,9%) | 27 (54,0%) | $X^2=3,2$ | .355 |
| 15. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality: if your problem is not life-threatening and they want to assist others to better support you? | 141(48,1%) | 49 (48,5%) | 34 (44,2%) | 36 (55,4%) | 22 (44,0%) | $X^2=2,2$ | .531 |
| Knowledge of mental illness mean score | 3,0 (0,3) | 3,0 (0,3) | 3,0 (0,3) | 3,0 (0,3) | 3,1 (0,3) | $F=1,5$ | .220 |

*Chi-squared test (or Fisher Exact Tests where appropriate), ANOVA *Significance at $p < .05$*

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4.4.1.2. Domain 1.b). Knowledge of where to seek mental health information

The respondents' knowledge of where to seek mental health information is depicted below.

Table 4.4: Knowledge of where to seek mental health information

| Items | Level of agreement | | | | | Test | p-value |
|--|--------------------|---------------|---------------|---------------|---------------|-----------|---------|
| | Total (N=294) | Year1 (n=101) | Year 2 (n=78) | Year 3 (n=65) | Year 4 (n=50) | | |
| 19. I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness. | 251 (85,4%) | 85 (83,3%) | 67 (87,0%) | 54 (83,1%) | 45 (90,0%) | $X^2=1,6$ | .651 |
| 17. I am confident using the computer or telephone to seek information about mental illness. | 250 (85,0%) | 87 (85,3%) | 69 (89,6%) | 52 (80,0%) | 42 (84,0%) | $X^2=2,6$ | .456 |
| 18. I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP). | 204 (69,4%) | 65 (63,7%) | 57 (74,0%) | 41 (63,1%) | 41 (82,0%) | $X^2=7,2$ | .063 |
| 16. I am confident that I know where to seek information about mental illness. | 201 (68,4%) | 73 (71,6%) | 44 (57,1%) | 44 (67,7%) | 40 (80,0%) | $X^2=8,1$ | .044* |

Knowledge of where to seek mental health information was reported, with most of the respondents (251, 85,4%) agreeing that they are confident they have access to resources (e.g., GP, internet, and friends) that they can use to seek information about mental illness. This was followed closely by the respondents reporting that they are confident using the computer or telephone to seek information about mental illness (250, 85,0%), with no significant difference between the groups. The area of the least knowledge of how to seek mental health information was regarding their confidence that they know where to seek information about mental illness (201, 68,4%). There was a significant difference between the groups, with 40 (80,0%) of the fourth-year students in agreement as opposed to 73 (71,6%) of those in first year, 44 (57,1%) in second year and 44 (67,7%) in third year ($X^2=8.1, p<.044^*$) (Table 4.4).

4.4.2. Domain 2: Attitudes that promote recognition of mental disorders and appropriate help-seeking behaviours

This domain is described in two subdomains according to the different aspects of attitude included in the MHLS. According to the MHLS, these subdomains both reflect aspects of attitudes that promote recognition of mental disorders and are only described separately in this study because the items pertaining to attitudes were measured according to two different Likert scales and therefore were analysed separately. Subdomain 1 describes attitudes that promote recognition of mental disorders and help-seeking behaviour, while subdomain 2 describes attitudes that promote recognition of mental disorders in terms of the social distance aspect of attitude. Social distance is described as “the willingness to engage in relationships of varying intimacy with a person” (Lauber, Nordt, Falcato & Rössler, 2004, p.265). It can be used to gauge people’s attitudes towards those with mental illness (Lauber et al., 2004). The subdomains are described below.

4.4.2.1. Domain 2.a). Attitudes that promote recognition of mental disorders and appropriate help-seeking behaviours

The attitudes of undergraduate nursing students regarding recognition of mental health disorders were measured by asking respondents to rate their agreement with a list of items. In addition, a mean attitude score was calculated (Table 4.5). The mean attitude score for recognition of mental disorders was 3,1 ($\pm 0,4$) out of a possible score of 4 [95% CI -3,3–3,1]. Overall, no significant difference was found in the mean attitude score between the groups ($F=1,9, p=.137$).

In classifying the response, about one third of the respondents (102, 34,8%) agreed that “People with a mental illness could snap out if it if they wanted”. This was followed closely by “People

with a mental illness are dangerous” (97, 33,2%), and only 34 (11.6%) of the respondents indicated that “a mental illness is not a real medical illness”.

Only a few respondents agreed to the statements measuring attitudes that promote appropriate help-seeking behaviours which indicate a positive attitude of help-seeking behaviour, with 38 (13,0%) agreeing that “treatment for a mental illness, provided by a mental health professional, would not be effective”. This was followed closely by those who agreed that “Seeing a mental health professional means you are not strong enough to manage your own difficulties” (35, 12,0%), and “If I had a mental illness, I would not seek help from a mental health professional” (32, 10,9%) (Table 4.5).

Table 4.5: Attitudes promoting recognition of mental disorders and appropriate help-seeking behaviour

| Items | Level of agreement | | | | | Test | p-value |
|---|--------------------|------------------|------------------|------------------|------------------|-----------|---------|
| | Total (N=294) | Year1 (n=101) | Year 2 (n=78) | Year 3 (n=65) | Year 4 (n=50) | | |
| 20. People with a mental illness could snap out if it if they wanted. | 102 (34,8%) | 34 (33,3%) | 26 (34,2%) | 21(20,6%) | 21 (20,6%) | $X^2=1,4$ | .699 |
| 23. People with a mental illness are dangerous. | 97 (33,2%) | 40 (39,2%) | 27 (36,0%) | 18 (27,7%) | 12 (24,0%) | $X^2=4,7$ | .193 |
| 21. A mental illness is a sign of personal weakness. | 42 (14,3%) | 16 (15,7%) | 12 (15,8%) | 6 (9,2%) | 8 (16,0%) | $X^2=1,7$ | .620 |
| 28. I believe treatment for a mental illness, provided by a mental health professional, would not be effective. | 38 (13,0%) | 11 (10,8%) | 14 (18,4%) | 6 (9,2%) | 7 (14,0%) | $X^2=3,2$ | .350 |
| 22. A mental illness is not a real medical illness. | 37 (12,6%) | 14 (13,7%) | 7 (9,2%) | 7 (10,8%) | 9 (18,0%) | $X^2=2,4$ | .489 |
| 26. Seeing a mental health professional means you are not strong enough to manage your own difficulties. | 35 (12,0%) | 11 (10,8%) | 13 (17,1%) | 6 (9,4%) | 5 (10,0%) | $X^2=2,6$ | .453 |
| 25. If I had a mental illness I would not tell anyone. | 34 (11,6%) | 13 (12,7%) | 11 (14,5%) | 3 (4,6%) | 7 (14,0%) | $X^2=4,1$ | .249 |
| 27. If I had a mental illness, I would not seek help from a mental health professional. | 32 (10,9%) | 11 (10,8%) | 10 (13,2%) | 4 (6,2%) | 7 (14,0%) | $X^2=2,4$ | .494 |
| 24. It is best to avoid people with a mental illness so that you don't develop this problem. | 15 (5,1%) | 6 (5,9%) | 3 (3,9%) | 2 (3,1%) | 4 (8,0%) | $X^2=1,7$ | .626 |
| Mean attitude score 95% CI -3,3-3,1 | 3,1 (0,4) | 3,1 (0,5) | 3,0 (0,5) | 3,1 (0,4) | 3,2 (0,3) | $F=0,8$ | .497 |

4.4.2.2. Domain 2.b). Attitudes that promote recognition of mental disorders in the social distance dimension

In measuring their willingness to associate with someone with mental illness, respondents were asked to rate a list of items. About two thirds of the respondents would be willing to make friends with someone with a mental illness (190, 64,8%) and to spend an evening socialising with someone with a mental illness (182, 62,1%). About half of the respondents would be willing to have someone with a mental illness start working closely with them on a job (150, 51,2%). Less than half of the respondents would be willing to have someone with a mental illness marry into their family (131, 44,9%), to employ someone if they knew the person had a mental illness (122, 41,6%), or to move next door to someone with a mental illness (119, 40,6%), and only 72 (24,6%) would be willing to vote for a politician if they knew the person had suffered a mental illness. In addition, the mean attitude score for recognition of mental disorders in the social distance dimension (Table 4.6) was 4,1 ($\pm 0,8$) out of a possible score of 5 [95% CI -4,2-4,0]. Overall, no significant difference was found in the mean attitude score between the groups ($F=0,9$, $p=.429$).

Table 4.6: Attitudes promoting recognition of mental disorders in the social distance dimension

| Items | Level of willingness | | | | | Test | p-value |
|--|----------------------|---------------|---------------|---------------|---------------|-----------|---------|
| | Total (N=294) | Year1 (n=101) | Year 2 (n=78) | Year 3 (n=65) | Year 4 (n=50) | | |
| 31. How willing would you be to make friends with someone with a mental illness? | 190 (64,8%) | 66 (64,7%) | 50 (65,8%) | 42 (64,6%) | 32 (64,0%) | $X^2=0,1$ | .997 |
| 30. How willing would you be to spend an evening socialising with someone with a mental illness? | 182 (62,1%) | 57 (55,9%) | 49 (64,5%) | 44 (67,7%) | 32 (64,0%) | $X^2=2,8$ | .424 |

| | | | | | | | |
|---|-------------|------------|------------|------------|------------|-----------|------|
| 32. How willing would you be to have someone with a mental illness start working closely with you on a job? | 150 (51,2%) | 46 (45,1%) | 35 (46,1%) | 40 (61,5%) | 29 (58,0%) | $X^2=6,0$ | .110 |
| 33. How willing would you be to have someone with a mental illness marry into your family? | 131 (44,9%) | 44 (43,1%) | 36 (48,0%) | 30 (46,2%) | 21 (42,0%) | $X^2=0,6$ | .889 |
| 35. How willing would you be to employ someone if you knew they had a mental illness? | 122 (41,6%) | 36 (35,3%) | 29 (38,2%) | 32 (49,2%) | 25 (50,0%) | $X^2=5,0$ | .168 |
| 29. How willing would you be to move next door to someone with a mental illness? | 119 (40,6%) | 38 (37,3%) | 29 (38,2%) | 32 (49,2%) | 20 (40,0%) | $X^2=2,6$ | .444 |
| 34. How willing would you be to vote for a politician if you knew they had suffered a mental illness? | 72 (24,6%) | 21 (20,6%) | 22 (28,9%) | 18 (27,7%) | 11 (22,0%) | $X^2=2,2$ | .536 |
| Mean attitude regarding willingness 95% CI -4,2–4,0 | 4,1 (0,8) | 4,1 (0,7) | 4,0 (0,9) | 4,2 (0,7) | 4,2 (1,0) | $F=0,9$ | .429 |

4.5. Summary

This chapter described the MHL of undergraduate nursing students at a selected university in the Western Cape. The demographic profile of the respondents was described and the results of the study were described according to the objectives. The following chapter entails the discussion of these results.

CHAPTER 5: DISCUSSION OF THE FINDINGS

5.1. Introduction

In this chapter, the results of this study are discussed within the context of empirical literature. It contains a discussion of the knowledge about and attitudes towards mental disorders of nursing students in the current study in relation to available literature of studies conducted among nursing students in other countries.

5.2. Knowledge of mental illness

The results of this study indicate that the nursing students at the selected university generally have good knowledge of mental disorders. The majority of the students were able to correctly identify mental disorders and effective professional and self-help treatments, as well as where to seek information on mental health.

The findings of this study are similar to findings of a study conducted by Seow et al. (2017) among nursing students in Singapore, which found that 70,4% of nursing students were able to correctly identify mental disorders. A study conducted by Shrestha (2013) among nursing students at a psychiatric clinical placement at a hospital in Nepal found that the majority of nursing students had adequate knowledge on causes of mental illness and effective professional and self-help treatments.

In contrast, a study conducted among university and college students (including nursing, medical, pharmacy and dentistry students) doing clinical placement at a general hospital facility in Kenya found that less than half of the students were able to identify mental disorders

and symptoms of mental disorders and had poor knowledge of psychiatry in general (Ndetei et al., 2011).

It is noteworthy that although no significant difference was found between the mean score for knowledge of mental disorders across the year levels, the mean score for knowledge of mental disorders in year level 4 was slightly higher than that of the other year levels, with the mean score for year level 4 being 3.1 and that for the other year levels being 3.0 (table 4.2). This is consistent with results of research done by Seow et al. (2017), which found that there was no significant association in nursing students' knowledge of mental disorders in terms of year level or psychiatric clinical placement. It is expected that nursing students in year 4 would be more knowledgeable on mental disorders compared to the lower year levels as they are exposed to psychiatric theory and clinical learning. Knowledge of mental disorders among students in year levels 1, 2 and 3 may be comparable to students in year level 4 due to lived experience, personal mental illness or having a friend or family member with a mental illness, through which they may have been exposed to basic knowledge of symptoms, treatments and risk factors of mental disorders.

Overall, a majority of the nursing students in the current study were knowledgeable on where to find information on mental illness. This concurs with findings of studies conducted by Gorczynski et al. (2017) and Schuck (2018) which found that medical and university students, respectively, were generally knowledgeable on where to seek information on mental illness. In the current study, there was a significant difference in the nursing students' knowledge of where to seek information about mental illness (item 16 table 4.4) in fourth-year students compared to students in years 1, 2 and 3, with far more students in year 4 indicating that they agree with the statement. This could be due to fourth-year students' exposure to mental illness

and psychiatric nursing through which they may have gained knowledge of resources for information on mental illness and experience of seeking information. This finding is similar to findings of Marwood and Hearn (2019), which indicated that greater knowledge of where to seek information on mental illness was significantly associated with higher year level among medical students.

5.3. Attitudes that promote recognition and appropriate help-seeking behaviour

The results of this study suggest that the large majority of undergraduate nursing students at the selected university hold generally positive attitudes towards mental disorders and mentally ill people, as seen in the relatively low endorsement of negative attitudes towards mental illness and help-seeking. This finding was consistent throughout the year levels. As contact with mentally ill people may not be limited to clinical or professional contact, nursing students in this study may have developed close relationships, or some familiarity, with mental illness in their family, friendships or other social relations, or may have a diagnosis of mental illness themselves, and therefore may be more accepting of individuals with mental illness. This may have resulted in less negative attitudes towards people with mental illness, which could explain why there was a low prevalence of negative attitudes towards mental disorders and help-seeking across the year levels in the current study. This is supported by research conducted by Samari et al. (2018), which found that having a family member or close friend with a mental illness was significantly associated with less stigmatising attitudes towards mental illness among nursing students. Samari et al. (2018) suggested that it may be because having a family member or close relationship with someone with a mental illness, or having experienced stigma because of their association with a mentally ill person, may have resulted in having increased feelings of empathy and more knowledge of mental disorders. However, more than half of the participants were unwilling to accept or associate themselves with a mentally ill person, as seen

in items 33, 35, 29 and 34 (Table 4.6), indicating that the majority of nursing students in this study generally prefer greater social distance from people with mental disorders. This may be due to beliefs surrounding causative factors of mental illness in African cultures, that people with mental illnesses are bewitched or that their ancestors have made them ill and that mentally ill people are considered outcasts in African communities due to ignorance of the aetiology of mental illness in African cultures.

The findings of this study are similar to those of studies conducted in other countries. They concur with those of a study conducted by Chang et al. (2017) comparing the attitudes of medical students and nursing students in Singapore, which found that both nursing and medical students generally maintained positive attitudes towards mental illness and people with mental illness (Chang et al., 2017). The findings of this study are also consistent with those of one conducted by Samari et al. (2018) of Singaporean nursing students, which also indicated relatively positive attitudes as seen in a low endorsement of negative attitudes towards mental illness. The participants of each of the aforementioned studies were asked identical or similar questions and yielded similar results. This includes the item “It is best to avoid people with a mental illness so that you don't develop this problem”, with 5% of Singaporean nursing students agreeing with the statement (Samari et al., 2018), compared to 5,1% of nursing students in the current study. The most noticeable difference was that 77,2% of Singaporean nursing students agreed with the statement, “People with a problem like X could get better if they wanted to” (Samari et al., 2018), while 34,8% of nursing students in the current study agreed that “People with a mental illness could snap out if it if they wanted”. More nursing students in the current study perceived people with mental illness to be dangerous in comparison with the Singaporean nursing students, with 33,2% in this study and 18,6% in Singapore agreeing that people with mental illnesses are dangerous. Students in the current

study may perceive people with mental disorders dangerous due to beliefs regarding mental illness in African cultures and may be fearful of the types of behaviour they may display. The perception that mentally ill people are dangerous may be more prevalent among nursing students in the current study as they may have been exposed to mentally ill people displaying violent or threatening behaviour in their families or communities and consequently generalised this perception to all mentally ill people. However, it is noted that in the current study, the belief that mentally ill people are dangerous shows a consistent decline across the year levels, with 39,2% in first year and 24% in fourth year endorsing the belief. As fourth-year students were found to be the least endorsing of the belief, it could be argued that it is due to their exposure to mentally ill persons in their clinical placements, as psychiatric clinical placement is unique to fourth-year nursing students at the selected university. This is consistent with findings of research that suggests that nursing students perceive mentally ill persons as less dangerous after clinical placement than they did before (Markstrom et al., 2009, Choi et al., 2016; Inan et al., 2019). In contrast with the above, Sreeraj et al. (2018) report that student nurses in four states in north India reported high levels of negative attitudes towards mental disorders and people with mental illness, as well as a study conducted by Bennett and Stennett (2015), which found that nursing students in Jamaica have negative attitudes towards people with mental illness.

The current study found that nursing students at the selected university generally had positive attitudes towards help-seeking and treatment provided by a mental health care professional. These are consistent with the findings of research conducted by Chang et al. (2017), which found that nursing and medical students maintained positive attitudes towards help-seeking for mental illness. Similarly, Picco et al. (2017) report that nursing and medical students in Singapore endorsed help-seeking for mental illness, specifically from a psychiatrist or

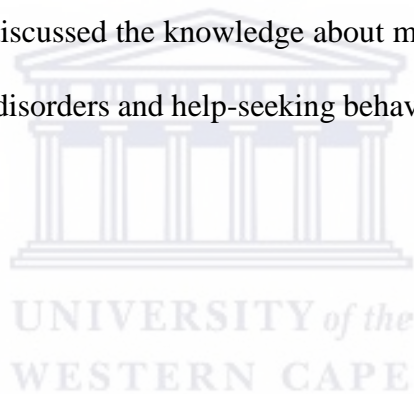
psychologist, as well as endorsing the helpfulness of psychotropic medication in treating mental illness, and believed that if help was not sought the problem would worsen. In contrast, a study conducted by El-Etreby et al. (2017) found that nursing students at a university in Egypt held negative attitudes towards other people who sought help for mental illness.

In the current study, students were willing to accept a person with a mental illness as a friend or colleague and were willing to socialise with a person with a mental illness; however, more than half of the students were unwilling to have people with a mental illness marry into their family, employ mentally ill people, be a neighbour to a mentally ill person or vote for a politician with a mental illness. These findings are consistent with other studies that have found that nursing students maintain negative attitudes towards accepting and socialising with a person with a mental illness. These results are comparable to those of a study conducted by Poreddi et al. (2014), which found that nursing students maintained negative attitudes in the attitude factor of stereotyping, which measured the degree of maintaining social distance from mentally ill people. Similarly, a study conducted by El-Etreby et al. (2017) found that nursing students in Egypt maintained some negative attitudes towards socialising with mentally ill people. In contrast, a study conducted by Sharma et al. (2018) found that nursing students in India had positive attitudes in stereotyping, and a study conducted by Chang et al. (2017) with nursing students in Singapore found that the majority of the subjects had positive attitudes in terms of maintaining social distance and accepting people with mental illness. Singaporean nursing students in the study by Samari et al. (2018) were found to be more willing to accept and associate with mentally ill people than the nursing students in the current study, with the exception of having a mentally ill person marry into their family, which 34% of the Singaporean students were willing to do, compared to 44,9% of the nursing students in the current study.

Although no significant difference in attitudes between the different year levels was found (Table 4.4), it is noted that fourth-year students obtained a slightly higher mean (3.2) than the other year levels (ranging from 3.0 to 3.1). This could be explained by research which suggests that nursing students who have participated in theoretical learning and psychiatric clinical placements display more positive attitudes towards mental illness – particularly with regard to psychiatric clinical experience, which is said to promote positive attitudes (Sari & Yuliastuti, 2017).

5.4. Summary

In this chapter, the researcher discussed the knowledge about mental illness and attitudes that promote recognition of mental disorders and help-seeking behaviour of the nursing students at the selected university.



CHAPTER SIX: CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1. Introduction

This chapter will summarise the findings, conclude the study, identify its limitations and provide recommendations based on the findings. The focus of the study was on the MHL of undergraduate nursing students enrolled in the Bachelor of Nursing programme at a selected university in the Western Cape. The purpose of the study was to determine the MHL of undergraduate nursing students. This was done by fulfilling the objectives of the study, which were to (1) determine nursing students' knowledge of mental illness and (2) determine nursing students' attitudes that promote the recognition of mental disorders and appropriate help-seeking behaviour.

A detailed search of literature pertaining to the study was conducted by the researcher. The researcher observed that there were limited studies related to the topic of interest in the literature, especially locally. To achieve the objectives of this study a quantitative, descriptive design was used to describe the MHL of the nursing students.

6.2. Summary of the findings

The objectives of the study were addressed as described below.

6.2.1. To determine undergraduate nursing students' knowledge of mental illness

In this study, nursing students had adequate knowledge on mental disorders. First-, second- and third-year students obtained a score of 50,2, while fourth-year students obtained a score of 52,8 out of a possible score of 60 for the items on knowledge of mental disorders. The nursing students also displayed adequate knowledge on where to seek mental health information, as

more than half of the students indicated knowing where and how to seek mental health information on all items measuring this aspect of knowledge.

6.2.2. To determine undergraduate nursing students' attitudes that promote the recognition of mental disorders and appropriate help-seeking behaviour

In this study, the nursing students generally had positive attitudes towards mental illness and seeking help for mental illness. However, the study also revealed that nursing students maintained negative attitudes in the aspect of social distance towards people with mental illness.

6.3. Limitations

The study was conducted at one of four universities in the Western Cape, and therefore it cannot be generalised for all nursing students in the province. This study did not determine correlations of MHL across the year levels, or determine relationships between the demographic variables, knowledge or attitudes of nursing students. As this study employed a self-reporting questionnaire, the students may have provided socially desirable answers regarding their attitudes toward mental illness and help-seeking. Furthermore, due to the phrasing of questions and statements on the MHLS and having options to choose from, they may have guessed the correct answer, which could have made the degree of knowledge of mental illness seem higher than it really is. As previously mentioned, there is a paucity of literature regarding the MHL of nursing students, with no studies conducted in South Africa found, and most of the research on MHL of student nurses being done in Australia and Singapore. The MHLS is a new instrument that has only been used in a few studies and, according to the researcher's knowledge, has not been used in a study of nursing students before. Although other researchers have calculated an overall mean score for the scale and used it as a means of determining

whether the participants in the study had good or poor mental health literacy, there is no established norm to define poor, moderate or high MHL levels. It was therefore not possible to allocate an overall score or determine the level of MHL of the nursing students in the current study. However, this research contributes to this field of research as it is of the first to be conducted among nursing students in South Africa.

6.4. Recommendations

Based on the findings of this study, the following recommendations are made to improve nursing education and clinical practice and to make advancements in this field of research. The recommendations made are as follows.

6.4.1. Nursing education

Based on the results of this study, nursing institutions could incorporate programmes that address attitudes towards mental illness. Introducing mental illness and addressing the attitudes of nursing students towards mental illness early in the programme can help the students form more positive attitudes towards mental illness at the start of their studies and also discourage inaccurate preconceived ideas. Training programmes, such as mental health first aid programmes, can be implemented early in their studies as these have been proven to enhance MHL among undergraduate nursing students.

6.4.2. Clinical practice

Clinical supervisors, clinical nurse educators and mental health care professionals need to provide support to students during clinical placement, and should debrief students if they have uncomfortable or traumatic experiences during the course of their psychiatric clinical placements. Nursing students need to be orientated at the start of their clinical placement and

can be gradually introduced to interacting with patients under supervision by nursing staff to assist the students with feeling comfortable interacting with patients and to provide support for students who may feel overwhelmed or fearful of patients and the new environment. Nursing and other mental health care professionals need to model positive attitudes towards mental illness for nursing students in clinical placements.

6.4.3. Future research

More research needs to be done regarding the MHL of nursing students in South Africa, as research in this area is scant. A qualitative approach may provide a better understanding of nursing students' MHL, especially regarding attitudes towards mental illness and help-seeking behaviour.

6.5. Conclusion

The aim of the study was to determine the MHL of undergraduate nursing students at a university in the Western Cape. The findings revealed that student nurses are knowledgeable about mental illness and generally maintain positive attitudes towards mental illness and help-seeking; however, they still maintain some negative attitudes, especially in the aspect of social distance.

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ANNEXURES

Annexure A – Ethics clearance letter



OFFICE OF THE DIRECTOR: RESEARCH RESEARCH AND INNOVATION DIVISION

Private Bag X17, Bellville 7535
South Africa
T: +27 21 959 4111/2948
F: +27 21 959 3170
E: research-ethics@uwc.ac.za
www.uwc.ac.za

10 August 2018

Ms CM Petersen
School of Nursing
Faculty of Community and Health Science

Ethics Reference Number: HS18/5/24

Project Title: Mental health literacy of undergraduate nursing students
at a university in the Western Cape.

Approval Period: 10 August 2018 – 10 August 2019

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

A handwritten signature in black ink, appearing to read 'Patricia Josias', is placed over a faint background image of a sunflower.

*Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape*

PROVISIONAL REC NUMBER - 130416-049

Annexure B – Permission letter from the University of the Western Cape



Administration Building, 1st Floor
ashaikjee@uwc.ac.za, nschoeman@uwc.ac.za
021 959 2110

07 September 2018

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE UNIVERSITY OF THE WESTERN CAPE

| | |
|---------------------------|--|
| Name of Researcher | : Cassandra Maria Petersen |
| Research Topic | : Mental health literacy of undergraduate nursing students at a university in the Western Cape |
| Date of issue | : 07/09/2018 |
| Reference number | : UWCRP070918CMP |

This serves as acknowledgement that you have obtained and presented the necessary ethical clearance and your institutional permission required to proceed with the above referenced project.

Approval is granted for you to conduct research at the University of the Western Cape for the period 07 September 2018 to 10 August 2019. You are required to engage this office in advance if there is a need to continue with research outside of the stipulated period. The manner in which you conduct your research must be guided by the conditions set out in the annexed agreement: *Conditions to guide research conducted at the University of the Western Cape*.

The University of the Western Cape promotes the generation of new knowledge and supports new research. It also has a responsibility to be sensitive to the rights of the students and staff on campus. This office will require of you to respect the rights of students and staff who do not wish to participate in interviews and/or surveys.

It is also incumbent on you to first furnish this office with a copy of the proposed publication should you wish to reference the University's name, spaces, identity, etc. prior to public dissemination.

Please be at liberty to contact this office should you require any assistance to conduct your research or specifically require access to either staff or student contact information.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Shaikjee'.

DR AHMED SHAIKJEE
DEPUTY REGISTRAR: ACADEMIC ADMINISTRATION
OFFICE OF THE REGISTRAR

UWCRP070918CMP
Page 1 of 3

ANNEXURE

CONDITIONS TO GUIDE RESEARCH CONDUCTED AT THE UNIVERSITY OF THE WESTERN CAPE

The onus rests on the researcher/investigator to observe and comply with the conditions set out below with the aim to conduct responsibly ethical research. Clarity must be sought from the authorising office should the interpretation of the conditions be unclear.

1. ACCOUNTABILITY

- 1.1. The University reserves the right to audit the research practices of the researcher/ investigator to assess compliance to the conditions of this agreement.
- 1.2. Data collection processes must not be adapted, changed or altered by the researcher/ investigator without written notification issued to the authorising office.
- 1.3. The University reserves to right to cease research if any proposed change to the data collection process is found to be unethical or in contravention of this agreement.
- 1.4. Failure to comply with any one condition in this agreement may result in:
 - 1.4.1. Disciplinary action instituted against a researcher/investigator employed or registered at the University;
 - 1.4.2. The contravention reported to the organisation employing or registering the external researcher/ investigator.

2. GOVERNANCE

- 2.1. Approval to conduct research is governed by the Protection of Personal Information Act, No 4 of 2013, which regulates the entire information life cycle from collection, through use and storage and even the destruction of personal information and it is incumbent on the researcher/investigator to understand the implications of the legislation.
- 2.2. The researcher/investigator must employ the necessary measures to conduct research that is ethically and legally sound.

3. ACQUIRING CONSENT & RIGHTS OF PARTICIPANTS

- 3.1. It is incumbent on the researcher / investigator to clarify any uncertainties to the participant about the research.
- 3.2. Written consent must be obtained from participants before their personal information is gathered and documented.
- 3.3. Participation in the research must be voluntary and participants must not be pressured or coerced.
- 3.4. Participants have the right to access their personal information, obtain confirmation of what information is in the possession of the researcher / investigator and who had access to the information.
- 3.5. Participants have the right to withdraw from the research and insist that their personal information not be used.

4. DATA AND INFORMATION MANAGEMENT

- 4.1. Due diligence must be afforded by the researcher/investigator to:
- 4.1.1. Mitigate any risks that could compromise the privacy of participants before
 - 4.1.2. during and after the research is conducted;
 - 4.1.3. Collect only information that is relevant to the aim of the research;
 - 4.1.4. Verify all personal information collected about a participant if the information is supplied by a source other than the participant;
 - 4.1.5. Refrain from sharing participant information with a third party;
 - 4.1.6. Apply for an exemption if the identity of participants should be revealed in the interest of the research aims.
- 4.2. The researcher/investigator must employ appropriate, reasonable and technical measures to protect, prevent loss of and unlawful or unauthorised access of research information.

Should you have any questions relating to this agreement please contact:

ashaikjee@uwc.ac.za, or
researchperm@uwc.ac.za



Annexure C – Permission from the author to use the Mental Health Literacy Scale

From: **CASSANDRA MARIA PETERSEN** 3216467@myuwc.ac.za
Subject: Re: Permission to use the MHLS
Date: 22 April 2019 at 21:37
To: Matt O'Connor matt.f.oconnor@gmail.com



Thank you Dr O'Connor

On Sun, 21 Apr 2019 at 23:04, Matt O'Connor <matt.f.oconnor@gmail.com> wrote:
Hi Cassandra

You are welcome to use the MHLS in your research

Matt

On Sun, 21 Apr 2019 at 10:34 pm, CASSANDRA MARIA PETERSEN <3216467@myuwc.ac.za> wrote:
Dear Dr O'Connor

I hope that this email finds you well. I am emailing you regarding the use of your MHLS. I am a master of nursing student, specialising in advanced psychiatric nursing, currently studying at the University of the Western Cape in South Africa. My research title is: Mental health literacy of undergraduate nursing students at a university in the Western Cape. I am currently in the process of completing my thesis. You may not remember me but you gave me permission to use your MHLS questionnaire via your ResearchGate profile on the 21st March 2018. The purpose of this email is to request from you to please confirm via email that you have given me permission to use your questionnaire as I am unable to print our conversation on ResearchGate as it seems that your profile has been deleted. I ask this because I need to attach a hard copy of evidence that you have given me permission to use the MHLS to my thesis.

I hope that this is not a problem for you. Thank you for your assistance in the past; it is greatly appreciated.

Kind regards,
Cassandra Petersen

Disclaimer - This e-mail is subject to UWC policies and e-mail disclaimer published on our website at: <https://www.uwc.ac.za/Pages/emaildisclaimer.aspx>



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel : +27 21-959 9345 Fax : 27 21-959 2679

E-mail: 3216467@myuwc.ac.za

INFORMATION SHEET

Project Title: Mental health literacy of undergraduate nursing students at a university in the Western Cape

What is this study about?

This is a research project being conducted by Cassandra Petersen, a Master of Nursing student, specializing in Advanced Psychiatric Nursing, at the University of the Western Cape. I am inviting you to participate in this research project because you are an undergraduate nursing student enrolled in the Bachelor of Nursing degree at the university of the Western Cape. I am interested in determining the mental health literacy of undergraduate nursing students. The purpose of this research project is to contribute to the knowledge base of the knowledge and attitudes of undergraduate student nurses toward mental illness. This knowledge will contribute to the understanding of the level of mental health literacy amongst nursing students in South Africa, and it may facilitate the development of effective interventions to enhance the mental health literacy of student nurses.

What will I be asked to do if I agree to participate?

You will be asked to complete a 35-question survey. The study will be conducted in your lecture room on the date decided with the relevant programme coordinators. The questionnaire may require 15 minutes to complete. The questionnaire consists of questions related to your knowledge of mental illness and treatments available, as well as your attitudes toward recognizing and seeking help for mental illness.

Would my participation in this study be kept confidential?

The researchers undertake to protect your identity and the nature of your contribution. To ensure your anonymity, the surveys are anonymous and will not contain information that may personally identify you. To ensure your confidentiality, you will be requested to place your consent form in a box and the box will be sealed. Thereafter, the questionnaire will be issued to you, and once completed, you will be requested to place your questionnaire in a separate box which will also be sealed.

The information you provide will be locked in filing cabinets and stored for up to five years, where after it will be shredded. If we write a report or article about this research project, your identity will be protected.

What are the risks of this research?

There may be some risks from participating in this research study, such as psychological or emotional distress. This may be due to stress caused by not being able to answer certain questions, discomfort caused by identifying your attitudes toward mental illness or fear of your information being exposed or associated with you. All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimize such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise, during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the researcher learn more about the mental health literacy of undergraduate student nurses. We hope that, in the future, other people might benefit from this study through improved understanding of factors influencing mental health literacy amongst nursing students and interventions to enhance the mental health literacy of nursing students and adequately prepare them for careers in psychiatric nursing.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time.

If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by Cassandra Petersen, Masters of Nursing student at the University of the Western Cape. If you have any questions about the research study itself, please contact Cassandra at: 3216467@myuwc.ac.za.

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof Jennifer Chipps

Head of School of Nursing

University of the Western Cape

Private Bag X17

Bellville 7535

jchipps@uwc.ac.za

Prof Anthea Rhoda

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17

Bellville 7535

chs-deansoffice@uwc.ac.za



This research has been approved by the University of the Western Cape's Humanities and Social Sciences Research Ethics Committee.

Humanities and Social Sciences Research Ethics Committee Office

University of the Western Cape

Private Bag X17

Bellville 7535

Tel: 021 959 2948/49/88 or 021 959 2709

Email: research-ethics@uwc.ac.za



UNIVERSITY OF THE WESTERN CAPE

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Tel : +27 21-959 9345 Fax : 27 21-959 2679

E-mail: 3216467@myuwc.ac.za

CONSENT FORM

Title of Research Project: Mental health literacy of undergraduate nursing students at a university in the Western Cape

The study has been described to me in a language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that participation in the research is not a course requirement. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name.....

Participant's signature.....

Date.....

Annexure F – Data collection tool

SECTION A – Demographic information

Age:.....

Please select the appropriate box:

Year of study:

| | | | |
|-------|--------|-------|--------|
| First | Second | Third | Fourth |
|-------|--------|-------|--------|

Gender:

| | |
|------|--------|
| Male | Female |
|------|--------|

Race:

| | | | | | |
|---------|-------|----------|--------|-------|-------|
| African | White | Coloured | Indian | Asian | Other |
|---------|-------|----------|--------|-------|-------|

Religion:

| | | | | | |
|-----------|--------|---------|-------|-------------|----------------|
| Christian | Muslim | Judaism | Hindu | No religion | Other faith |
|-----------|--------|---------|-------|-------------|----------------|

Do you have previous experience as a mental healthcare provider?

(This question refers to working experience and does not include experience in psychiatric nursing clinical placements)

| | |
|-----|----|
| Yes | No |
|-----|----|

SECTION B - Mental Health Literacy Scale

The purpose of these questions is to gain an understanding of your knowledge of various aspects to do with mental health. When responding, we are interested in your degree of knowledge. Therefore when choosing your response, consider that:

Very unlikely = I am certain that it is NOT likely

Unlikely = I think it is unlikely but am not certain

Likely = I think it is likely but am not certain

Very likely = I am certain that it IS very likely

| Item | 1 | 2 | 3 | 4 |
|---|---------------|----------|--------|---------------|
| | Very unlikely | Unlikely | Likely | Very unlikely |
| 1.If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have Social Phobia ? | | | | |
| 2.If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have Generalised Anxiety Disorder ? | | | | |
| 3.If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder ? | | | | |
| 4.To what extent do you think it is likely that Personality Disorders are a category of mental illness? | | | | |

| | | | | |
|---|--|--|--|--|
| 5. To what extent do you think it is likely that Persistent Depressive Disorder (Dysthymia) is a disorder? | | | | |
| 6. To what extent do you think it is likely that the diagnosis of Agoraphobia includes anxiety about situations where escape may be difficult or embarrassing? | | | | |
| 7. To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood? | | | | |
| 8. To what extent do you think it is likely that the diagnosis of Substance Abuse Disorder can include physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)? | | | | |
| 9. To what extent do you think it is likely that in general in South Africa, women are MORE likely to experience a mental illness of any kind compared to men? | | | | |
| 10. To what extent do you think it is likely that in general, in South Africa, men are MORE likely to experience an anxiety disorder compared to women? | | | | |
| 11. To what extent do you think it would be helpful for someone to improve their quality of sleep if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)? | | | | |
| 12. To what extent do you think it would be helpful for someone to avoid all activities or situations that made them feel anxious if they were having difficulties managing their emotions? | | | | |
| 13. To what extent do you think it is likely that Cognitive Behaviour Therapy (CBT) is a therapy based on challenging negative thoughts and increasing helpful behaviours? | | | | |
| 14. Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality : <i>If you are at immediate risk of harm to yourself or others</i> | | | | |

| | | | | |
|---|--|--|--|--|
| <p>15. Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply.</p> <p>To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality:</p> <p><i>if your problem is not life-threatening and they want to assist others to better support you</i></p> | | | | |
|---|--|--|--|--|

Please indicate to what extent you agree with the following statements:

| Item | 1 | 2 | 3 | 4 | 5 |
|---|-------------------|----------|---------------------------|-------|----------------|
| | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly Agree |
| 16. I am confident that I know where to seek information about mental illness | | | | | |
| 17. I am confident using the computer or telephone to seek information about mental illness | | | | | |
| 18. I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP) | | | | | |
| 19. I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness | | | | | |

Please indicate to what extent you agree with the following statements:

| Item | 1 | 2 | 3 | 4 | 5 |
|---|-------------------|----------|---------------------------|-------|----------------|
| | Strongly Disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
| 20. People with a mental illness could snap out if it if they wanted | | | | | |
| 21. A mental illness is a sign of personal weakness | | | | | |
| 22. A mental illness is not a real medical illness | | | | | |
| 23. People with a mental illness are dangerous | | | | | |
| 24. It is best to avoid people with a mental illness so that you don't develop this problem | | | | | |
| 25. If I had a mental illness I would not tell anyone | | | | | |
| 26. Seeing a mental health professional means you are not strong enough to manage your own difficulties | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| 27. If I had a mental illness, I would not seek help from a mental health professional | | | | | |
| 28. I believe treatment for a mental illness, provided by a mental health professional, would not be effective | | | | | |

Please indicate to what extent you agree with the following statements:

| Item | 1 | 2 | 3 | 4 | 5 |
|---|----------------------|--------------------|------------------------------|------------------|--------------------|
| | Definitely unwilling | Probably unwilling | Neither unwilling or willing | Probably willing | Definitely willing |
| 29. How willing would you be to move next door to someone with a mental illness? | | | | | |
| 30. How willing would you be to spend an evening socialising with someone with a mental illness? | | | | | |
| 31. How willing would you be to make friends with someone with a mental illness? | | | | | |
| 32. How willing would you be to have someone with a mental illness start working closely with you on a job? | | | | | |
| 33. How willing would you be to have someone with a mental illness marry into your family? | | | | | |
| 34. How willing would you be to vote for a politician if you knew they had suffered a mental illness? | | | | | |
| 35. How willing would you be to employ someone if you knew they had a mental illness? | | | | | |

Annexure G – Code book

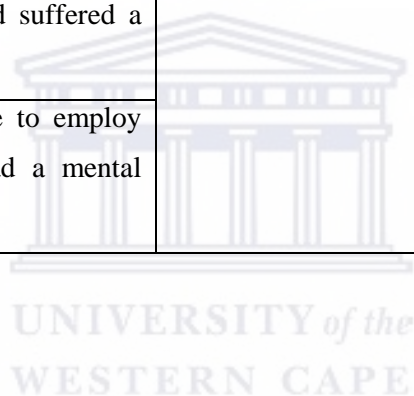
| Variable | SPSS variable name | Coding instruction |
|--|-------------------------|---|
| Identification number | Id | Subject identification number |
| Age | Age | Age in years |
| Year of study | Year | 1- First year 2- Second year 3- Third year 4- Fourth year |
| Gender | Sex | 1- Male 2- Female |
| Race | Race | 1- African 2- White 3- Coloured 4- Indian 5- Asian 6- Other |
| Religion | Religion | 1- Christian 2- Muslim 3- Judaism 4- Hindu 5- No religion 6- Other faith |
| Past experience | Experience | 1- Yes 2- No |
| 1.If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have Social Phobia? | Question1 Question13 | – 1- Very unlikely 2- Unlikely 3- Likely 4- Very likely |

| | | |
|--|--|--|
| <p>2.If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have Generalised Anxiety Disorder?</p> | | |
| <p>3.If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder?</p> | | |
| <p>4.To what extent do you think it is likely that Personality Disorders are a category of mental illness?</p> | | |
| <p>5. To what extent do you think it is likely that Persistent Depressive Disorder (Dysthymia) is a disorder?</p> | | |
| <p>6.To what extent do you think it is likely that the diagnosis of Agoraphobia includes anxiety about situations where escape may be difficult or embarrassing?</p> | | |
| <p>7.To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood?</p> | | |
| <p>8. To what extent do you think it is likely that the diagnosis of Substance Abuse Disorder can include physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)?</p> | | |
| <p>9.To what extent do you think it is likely that in general in South Africa, women are</p> | | |

| | | |
|--|---|--|
| <p>MORE likely to experience a mental illness of any kind compared to men?</p> | | |
| <p>11.To what extent do you think it would be helpful for someone to improve their quality of sleep if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)?</p> | | |
| <p>13. To what extent do you think it is likely that Cognitive Behaviour Therapy (CBT) is a therapy based on challenging negative thoughts and increasing helpful behaviours?</p> | | |
| <p>14.Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality: <i>If you are at immediate risk of harm to yourself or others</i></p> | | |
| <p>10.To what extent do you think it is likely that in general, in South Africa, men are MORE likely to experience an anxiety disorder compared to women?</p> | <p>Question10; Question12; Question15</p> | <p>1- Very likely 2- Likely 3- Unlikely 4- Very unlikely</p> |
| <p>12.To what extent do you think it would be helpful for someone to avoid all activities or situations that made them feel anxious if they were having difficulties managing their emotions?</p> | | |
| <p>15.Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality:</p> | | |

| | | |
|---|--------------------------|---|
| <i>if your problem is not life-threatening and they want to assist others to better support you</i> | | |
| 16. I am confident that I know where to seek information about mental illness | Question16 Question19 | – 1- Strongly disagree 2- Disagree 3- Neither agree or disagree 4- Agree 5- Strongly agree |
| 17. I am confident using the computer or telephone to seek information about mental illness | | |
| 18. I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP) | | |
| 19. I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness | | |
| 20. People with a mental illness could snap out if it if they wanted | Question20 Question28 | – 1- Strongly agree 2- Agree 3- Neither agree or disagree 4- Disagree 5- Strongly disagree |
| 21. A mental illness is a sign of personal weakness | | |
| 22. A mental illness is not a real medical illness | | |
| 23. People with a mental illness are dangerous | | |
| 24. It is best to avoid people with a mental illness so that you don't develop this problem | | |
| 25. If I had a mental illness I would not tell anyone | | |
| 26. Seeing a mental health professional means you are not strong enough to manage your own difficulties | | |
| 27. If I had a mental illness, I would not seek help from a mental health professional | | |
| 28. I believe treatment for a mental illness, provided by a mental health professional, would not be effective | | |

| | | | |
|---|------------|---|---------------------------------|
| 29. How willing would you be to move next door to someone with a mental illness? | Question29 | – | 1- Definitely unwilling |
| 30. How willing would you be to spend an evening socialising with someone with a mental illness? | Question35 | | 2- Probably unwilling |
| 31. How willing would you be to make friends with someone with a mental illness? | | | 3- Neither unwilling or willing |
| 32. How willing would you be to have someone with a mental illness start working closely with you on a job? | | | 4- Probably willing |
| 33. How willing would you be to have someone with a mental illness marry into your family? | | | 5- Definitely willing |
| 34. How willing would you be to vote for a politician if you knew they had suffered a mental illness? | | | |
| 35. How willing would you be to employ someone if you knew they had a mental illness? | | | |



Annexure H – Editorial certificate

Nathan T Lowe
9 Lamborghini Avenue
Wierda Park
Centurion
0157
Tel: 076 362 7852
Email: nathanthomaslowe@gmail.com
10 November 2019

To whom it may concern

I hereby declare that I, Nathan Thomas Lowe, edited Cassandra Petersen's mini-thesis entitled 'Mental health literacy of undergraduate nursing students at a university in the Western Cape'.

Regards



Nathan T Lowe

Language practitioner for the University of Pretoria's Language Unit