NURSES ATTITUDES TOWARDS STIMULATION ACTIVITIES FOR PERSONS WITH INTELLECTUAL DISABILITY AT A PSYCHIATRIC HOSPITAL WITHIN THE WESTERN CAPE

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ABSTRACT

Background: Globally, stimulation activities yield positive outcomes for persons with intellectual disability (ID), in terms of behavioural and cognitive changes. Intellectual disability is characterised by significant changes in intellectual and adaptive behaviours, identified before the age of 18. The treatment of institutionalised ID persons involves: the medical management of symptoms and aggressive behaviour (as behavioural therapies); physiotherapy, within a multidisciplinary team approach; and activity programmes, including stimulation activities, which are managed by nurses. However, given the shortage of nurses, and the complex needs of people with ID, as well as the negative attitudes, stimulation activities may not be considered a priority in the provision of nursing care.

Aim: The aim of this current study was to explore nurse's attitudes towards, as well as the use of, stimulation activities for people with intellectual disability, at a psychiatric hospital in the Western Cape, South Africa. The objectives formulated to achieve the aim were, to determine the correlation between nurses' attitudes and stimulation activities; the expectations about the use of stimulation activities; and the extent of the nurses' influence on the use of stimulation activities.

Method: A descriptive, survey design, using convenience sampling, was employed to select 168 nurses, who were caring for people with intellectual disability, at a psychiatric hospital in the Western Cape, South Africa. A 5-point Likert type, 23 itemed structured questionnaire, adapted from an existing one developed by Kemper, Martin, Block, Shoaf & Woods, (2004) and Sung, Lee, Chang & Smith (2004), was used to collect the data, yielding a response rate of 50,5% (N=85). Data collection transpired after permission was obtained from the chief nursing officer and the nursing managers of the psychiatric hospital under study. The data were analysed, using the Statistical Package for Social Sciences (SPPS) version 27.

Results: The results of this current study revealed that most of the nurses had positive attitudes towards stimulation activities for persons with intellectual disability. Positive attitudes were strongly related to, while negative attitudes were inversely associated with, their expectations of the impact of stimulation activities on persons with ID, though they were not statistically significant.

Recommendations: Qualitative research studies should be recommended, to gain a deeper understanding of nurses' attitudes towards stimulation activities, and obtain narratives of rich descriptions.

KEYWORDS

Attitudes

Intellectual Disability

Nurses

Psychiatric hospital

Stimulation activities



ABBREVIATIONS

- ID Intellectual disability
- SPSS Statistical Package for Social Sciences
- WHO World Health Organization



DECLARATION

I declare that the study, *Nurses attitudes towards stimulation activities for persons with intellectual disability at a psychiatric hospital within the Western Cape*, is my original work, which has not been submitted for any degree or examination at any other University, and all the sources I have used, or quoted, have been indicated and acknowledged by complete references.

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Date: December 2022

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CHAPTER ONE

ORIENTATION TO THE STUDY

1.1. Introduction

Intellectual disability is a public health problem, affecting approximately 1 to 3 percent of the global population, and as many as 200 million people worldwide (Foskett, 2014). Currently, the approximated population of South Africa is measured at 54 001 953 individuals (Foskett, 2014), while the prevalence of persons living with intellectual disability ranges from 181 447 to 340 212, inclusive of dual diagnoses. In the Western Cape, 149 facilities provide residential care to 7 982 persons with disabilities [6,416 persons in urban and 1,566 in rural areas] (Foskett, 2014). As a result, persons with intellectual disability are being admitted to psychiatric hospitals for long term management and care.

Psychiatric hospitals are identified as facilities, where patients/persons, suffering from a diagnosed mental illness, are treated, cared for, and managed. Admission to psychiatric hospitals are differentiated between short term admission (72 hours), intermediate admission, and long term residential admission, defined under the Mental Healthcare Act (Republic of South Africa [RSA], Act no 17 of 2002). Psychiatric admissions could be voluntary or involuntary. Voluntary admissions to psychiatric hospitals occur when persons with a diagnosed mental illness voluntarily admit themselves. This implies that they are allowed to leave the facility of their own free will (RSA, 2002). Involuntary admissions occur when patients/persons are admitted by a partner/spouse or legal guardian, due to their incapability of making informed decisions, and refusing health intervention (RSA, 2002). Assisted admissions, as defined by the Mental Healthcare Act (RSA, 2002), refers to mental healthcare persons, who lack the capacity to consent, but do not object to care treatment or rehabilitation (implying that they are cooperative) are classified as assisted.

According to Sung et al. (2011), nurses, who are employed at institutions where persons with intellectual disability reside, are expected to provide stimulation activities, in addition to direct nursing care. Capri and Buckle (2015), while investigating nurses' experiences of providing care for persons with intellectual disability, collected data from a sample of sixteen (n = 16) free narrative interviews, and conducted a thematic analysis of the data. The thematic analysis

concluded that system fatigue contributed to negative experiences of nursing care for persons with intellectual disability. The results of that study were categorised under five different themes, namely, care burden, relational interaction, system fatigue, infantilising dynamic of care, and resources for coping. The study concluded that the negative experiences of nursing staff result from system fatigue.

This current research study is focused on the nurses, who provide stimulation activities as a method of treatment and care to persons with intellectual disability (ID) at a psychiatric hospital in the Western Cape. People with intellectual disability have deficits in their adaptive functioning; therefore, in order to meet their varied nursing care needs, the increased workload on nurses impacts the programmes offered (Capri & Buckle, 2015). Carr et al. (2016) assert that people with intellectual disability present with a range of deficits in reasoning, problem solving, abstract thinking, judgement, and academic learning. Deficits in the adaptive functioning of persons with intellectual disability causes their failure to meet developmental and social cultural standards for personal independence. Persons with intellectual disability have a cognitive and adaptive disability that is detected before adulthood, and observed in daily living activities and cognitive reasoning (World Health Organization [WHO], 2012). They may be considered a burden on nursing staff in psychiatric hospitals, due to the range of deficits associated with ID, such as reasoning, self-care, and independence (Atkinson et al., 2010), which require varied nursing care.

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Some persons with ID may also present with challenging behaviour, which may be difficult to manage. As the use of psychotropic medications, with long term negative side effects, to manage behaviour problems in persons with intellectual disability, is undesirable (Capri & Buckle, 2015), non-pharmacological strategies have been implemented, as per the Mental Health Care Act (RSA, 2002), to assist with their quality of life. These include, among others, daily activity programmes, including stimulation activities. Stimulation activities are aimed at developing motor, cognitive, and self-care abilities (Capri & Swartz, 2018), and include various activities, such music therapy, motor therapy, play therapy, dance therapy, to name a few (Capri, 2016; Houwen et al., 2014).

A systematic review, conducted by Houwen et al. (2014), was aimed at reviewing evidence related to motor interventions for patients with social and profound intellectual disabilities, to

improve motor, cognitive, and social outcomes. This review included 295 articles, of which 46 met the inclusion criteria, covering 45 different studies. According to Houwen et al. (2014), the majority of the studies focused on behavioural therapy with (n = 21), or without (n = 15), assistive technology. Theoretical frameworks were reported in nine of the 45 studies, and the findings of thirty-eight revealed improvements in motor function. In addition, the findings revealed that, where health care professionals performed repetitive motor tasks on a daily, or weekly basis, improvement in cognition and motorised abilities were observed (Houwen et al., 2014).

Currently, health care professionals, namely physiotherapists and occupational therapists, do provide activities for the wellbeing of the institutionalised persons with ID. However, nurses occupy the major segment of health care personnel, and are the most appropriate care providers to conduct suitable stimulation activities on a daily basis (Sung et al., 2011), in addition to providing basic nursing care, such as personal hygiene care, among others. A phenomenological study conducted by Wells (2017), was aimed at exploring the experiences and perceptions of direct care staff, namely nurses, when their patients with ID participated in music therapy. The objective of this study was to observe any benefits observed in clients with ID, when participating in music therapy. All the participants included, were over the age of 18 years, while a qualitative research approach was employed, with 60-minute semi-structured interviews, using a series of open-ended questions. The results of the study were as follows:

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- Direct care staff observed that persons with ID experienced personal enjoyment, while interacting and connecting via music therapy.
- The staff noticed that music therapy was effective in the social, physical, and cognitive functioning of ID patients.
- Positive attitudes were realised during the application of music therapy (Wells, 2017).

The above study of Wells (2017), consequently, highlights that specified intellectual disability nursing care is non-existent, instead, care is generalised to all mental health care persons. Similarly, Capri and Buckle (2015) highlights the lack of ID resources, as well as education for nurses to provide specified treatment to ID persons. Additionally, according to Appelgren et al. (2018), a lack of knowledge regarding the treatment of ID patients exists, with the result that nurses provide care, which is not patient focused. The aim of this current study, therefore,

was to explore the nurses' attitudes towards the use of stimulation activities for persons with ID at a selected psychiatric hospital.

1.2. Background

The term, stimulation, is referred to as the act of doing, or providing a stimulus, to yield an outcome (Leung, 2018). Consequently, the use of stimulation activities, facilitated by nurses, is identified as a means of enhancing the cognitive functioning of persons with intellectual disability. This is significant, given that intellectual disability is categorised as a reduced level of intellectual functioning, which results in the diminished ability to adapt to the daily demands of a social environment (Atkinson et al., 2010).

However, stigmatisation is prevalent in the care and management of persons with ID, as discussed in a systematic review, conducted by Pelleboer-Gunnink et al. (2017), which was aimed at reviewing mainstream health professionals' (mainly nurses) attitudes towards people with intellectual disability. Pelleboer-Gunnink et al. (2017) identified that stigmatising attitudes negatively affects the treatment of persons with ID. These authors concluded that stigmatising attitudes towards persons with ID were due to the lack of knowledge and familiarity. In addition, they concluded that nurses, who manage the care of ID persons, reported feelings of stress, lack of confidence, fear, anxiety, and a tendency to treat them differently to other disabled persons. UNIVERSITY of the

In another systematic review, conducted by Bakken and Sageng (2016), 137 articles were reviewed, of which 16 were reviewed in full, aimed at summarising empirical mental health nursing studies. The findings revealed that intellectual disability nursing is under-researched, and the negative attitudes of health care professionals are associated with the lack of education. Health care professionals, namely nurses, do not individualise the treatment of the persons to whom they provide care, as the care provided is generalised to mental health care, and not specific to intellectual disability nursing (Bakken & Sageng, 2016).

1.2.1. Attitudes of nurses

The attitudes of nursing staff play a vital role in the approach to stimulation activities, such as play and music therapy, to enhance motor skills and cognition (Sung et al., 2011). Positive attitudes of staff generate an eagerness to perform the stimulation activities.

According to Bakken and Sageng (2016), the positive attitudes of nurses and health care providers play a major role in the enhancement of the level of care provided to persons with ID, and may promote job fulfilment. However, negative attitudes are associated with stigmatisation, as well as the lack of education and time.

Due to the paucity in literature regarding ID, for this current study, dementia is used instead, as it has a similar decline in adaptive functioning, similar to persons with intellectual disability. According to Sung et al. (2011), music has provided a positive outcome to the management of behavioural symptoms in older people with dementia, living in long term facilities. The aim of the study of Sung et al. (2011) was to explore the attitudes of nursing staff, and the use of music for older people with dementia, in long term facilities (Sung et al., 2011). A cross-sectional research design was used to achieve this aim. A convenience sample of 285 nursing staff was selected, and a self-administered questionnaire was employed to explore the attitudes of nursing staff. A total of 214 staff completed the questionnaire, yielding a response rate of 75.1%. The findings revealed that positive attitudes were observed in the implementation of music and play therapy as a treatment modality for persons with dementia. Therefore, it could be concluded that the implementation of music therapy, as part of daily activity programmes, could be useful to enhance the mood of patients.

A study conducted by Wells (2017) explored the positive experiences of direct care staff, using music therapy as a treatment modality for long term institutionalised ID persons. Music therapy is deemed a stimulation activity. The findings revealed that the therapy provided, positively changed the mood and cognition of persons with ID. Houwen et al. (2014) concur that the positive attitudes of nurses are directly related to improvements of the cognition and motorised abilities, resulting from repetitive motor tasks.

1.2.2. Role of the nurse

The role of the nurse in ID management and care is complex. Nurses are the largest contingent of frontline health care personnel, in all aspects of healthcare (Capri & Buckle, 2015). Nurses, working in ID care, are responsible for daily nursing care, for example, grooming of persons, basic care needs, medication, management, as well as the development of activity programmes, such as stimulation activities. They fulfil a pivotal role in the care and management of persons with ID, as they are the healthcare workers

who manage, treat, and assess ID persons on a daily basis, to ensure that all changes are recorded for further diagnoses and management.

The role of the nurse in stimulation activities is major, as the nurses perform these activities daily, as well as all other allocated responsibilities. A nurse, working within the field of intellectual disability, has key roles to play in the promotion of health, using key interventions that promote, sustain, and maintain biological, psychosocial well-being. These could include: neurodevelopmental assessment, diagnosis and intervention; nursing a person with complex physical needs; comprehensive mental health assessment and treatment; and the provision of guidance and support (Royal College of Nursing, 2018).

1.2.3. Use of stimulation activities

The use of stimulation activities has been mandated in South Africa, according to the Mental Health Care Act (RSA, 2002), as it improves cognitive functioning of intellectually disabled persons (Bullen et al., 2018). Stimulation activities are routinely identifiable by an activity type schedule in inpatient wards, some of which are conducted at least twice weekly (for example, woodwork), and others as daily group activities (for example, playing ball/music). Stimulation activities are used to create a therapeutic environment, conducive to recovery, learning, and the management of aggression, which helps in the assessment of cognitive functioning and level of communication, improves staff and inpatient satisfaction, promotes staff skills, and improves therapeutic relationships overall (Bullen et al., 2018).

The advantage of the use of stimulation activities is the improvement of motor and cognitive abilities in patients with intellectual disability (Houwen et al., 2014). In a systematic study, conducted by Houwen et al. (2014), articles of 4 databases, namely, Medline, PsychINFO, ERIC, and CINHAL were reviewed, yielding 295, of which 46 met the inclusion criteria, with 38 reporting a significant improvement in the motor activities of patients with intellectual disability. Eight (8) of these reviewed articles discussed the improvement in recreational and more specialist motor skills.

In a qualitative study by Bhyat et al. (2014), semi-structured interviews were conducted with four nurses, who provided physical activity to patients with intellectual disability.

Physical activity, as a form of stimulation activity, facilitated by these nurses to patients with intellectual disabilities, on a weekly basis in long term facilities, yielded positive results in mood, motor activities, and improved gait. Regular use of physical activity, as a stimulation activity, has been observed to improve mood, reduce anxiety and depression, as well as enhance social inclusion and belonging (Bhyat et al., 2014). Additionally, the findings of a study on music therapy, conducted by Sung et al. (2011), revealed similar outcomes in persons with dementia. Music therapy is a form of stimulation activity, and its use among patients with dementia, yielded positive outcomes in mood and cognitive abilities (Sung et al., 2011).

1.3. Problem statement

Various research studies (Anagnostopoulos & Soumaki, 2011; Capri & Buckle, 2015; Harmon, 2017; Sung et al., 2011) allude to the global and national use of stimulation activities, as well as the role it plays in the treatment of ID and quality of life. However, according to the researcher, no known studies currently exist that are related to the experiences of nurses, who provide stimulation activities in South Africa. Additionally, it is evident that none of the following studies, namely, Astramovich et al. (2015), Capri (2016), Capri and Swartz (2018), Harmon (2017), Sung et al. (2011), as well as Wells (2017), have researched stimulation activities exclusively as a nursing intervention. Stimulation activities consist of a range of activities, namely, music (Sung et al., 2011; Wells, 2017), play (Astramovich et al., 2015), dance (Sung et al., 2011), ball skills (Astramovich et al., 2015), visual imagery (Wells, 2017), among others, implemented concurrently on a daily basis. The challenge is that the level of functioning of persons with ID differs from person to person; however, the stimulation activities provided at psychiatric hospitals are generalised, according to the wide range of functioning (Capri & Swartz, 2018). According to Capri and Buckle (2015), nurse's attitudes towards stimulation activities are influenced by factors such as, fatigue, care burden, lack of education, and training.

1.4. Hypotheses of the study

- There is a positive correlation between positive nursing attitudes and stimulation activities.
- There is a negative correlation between negative nursing attitudes and stimulation activities.

1.5. Research question

• What are the attitudes of nurses towards providing, and the use of, stimulation activities to/for persons with intellectual disability?

1.6. Aim of the study

The aim of this study was to determine nurses' attitudes towards the use of stimulation activities for people with intellectual disability, at a psychiatric hospital in the Western Cape, South Africa.

1.7. Objectives of the study

The objectives of this study were:

- To investigate nurse's attitudes towards stimulation activities for people with intellectual disability.
- To investigate nurse's expectations about the use of stimulation activities for people with intellectual disability.
- To investigate to what extent nurses use stimulation activities for people with intellectual disability.
- To determine the factors that influence nurse's use of stimulation activities for people with intellectual disability.

1.8. Significance of the study

Nurses are the forefront of the health care industry, constituting most of the personnel, who provide 24-hour nursing care to patients. The significance of this current study is that nurses perform duties, which are far beyond their scope of practice in the care and management of persons with ID; however, often their voices are marginalised in discourses of disability. Evidently, the nurse's role in stimulation has a positive outcome for persons with ID, which forms the basis of this current study. Eliciting the factors relating to the use of stimulation activities may enable policy makers to draft legislation that would support nurses in offering stimulation activities to people with ID.

1.9. Research methodology

A quantitative research approach, utilising a descriptive survey design was selected in this study. An existing, adapted, 5-point Likert scale, self-administered structured questionnaire developed by Kemper et al. (2004) consisting of two sections, was used to achieve the aim of this current study. The research approach, design, and instrument of this current study are discussed, in detail, in Chapter 3.

1.10. Definitions of key concepts

- Attitudes Attitudes help us to understand how people perceive issues and processes in care, and determine what they deem important, good, relevant, and appropriate (Leskovic et al., 2016). (*Operational definition: In this current study, 'attitudes' refer to how nurses perceive stimulation activities that are conducted with intellectually disabled people*).
- Intellectual disability a range of intellectual functioning extending from partial selfmaintenance under close supervision, together with limited self-protection skills in a controlled environment, through limited self-care and requiring constant aid and supervision, to severely restricted sensory and motor functioning, requiring nursing care as defined by the Mental Health Care Act (RSA, 2002). (*Operational definition: In this current study, 'intellectually disabled' refers to the persons, who are cared for by nurses at a selected psychiatric hospital, and who may, or may not, receive stimulation activities*).
- Nurse Being a nurse encompasses standards of professional nursing practice that identify the roles and responsibilities of a nurse in any healthcare setting, to perform safe, competent, and ethical care, as defined by their educational, legislative, and regulatory authority (South African Nursing Council [SANC], 2013). (*Operational definition:* A nurse is an advanced psychiatric professional nurse, a general professional nurse, an enrolled nurse, and enrolled nursing assistant, who provides nursing care to the MHCUs at the selected psychiatric hospital).
- **Psychiatric hospital** is a hospital that offers care, treatment, and rehabilitation to MHCUs (RSA, 2002). (*Operational definition:* A psychiatric hospital is the selected hospital in the Western Cape, which offers mental health care services to MHCUs, as well as the research setting of this current research study).

- Stimulation activities Activities for intellectually disabled individuals, aimed at developing their motor, cognitive, and self-care abilities (Capri et al., 2018). (*Operational definition:* In this current study, it refers to stimulation activities that are facilitated by nurses at the selected psychiatric hospital, which includes music therapy, play or games).
- Use To put into action or service (Leskovic et al., 2016). (*Operational definition: In this current study, 'use' means the length of time that stimulation activities are conducted*).

1.11. Chapter outline

This introductory chapter provided a background for this current research study. In addition, brief descriptions of the problem statement, hypotheses, research questions, aim, objectives, significance, research methodology, and the definitions of key concepts, are outlined. The rest of the thesis is presented as follows:

Chapter 2: In this chapter, the literature review, which supports the argument that culminated in the research aim and objectives, is presented. In addition, the researcher provides correlations between attitudes and stimulation activities, nurses' expectations about the use of stimulation activities, and the factors that influence nurses' use of stimulation activities for persons with ID.

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Chapter 3: In this chapter, the researcher presents a detailed explanation of the research design and methodology used in this study.

Chapter 4: In this chapter, the findings obtained from the data analysis is presented in tables and graphs.

Chapter 5: The findings of this study are interpreted and discussed in this chapter.

Chapter 6: In this chapter, the study is concluded by reflecting on the research objectives and the aim of the study, as well as a summary of the findings in Chapter 4. The limitations of the study areas are identified. Finally, the study is concluded with possible recommendations for further research.

1.12. Summary

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

In the following chapter, Chapter 2, the researcher conducts a literature review on empirical literature of nurses' attitudes towards stimulation activities.



CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

A literature review is defined as a broad, yet systematic way of collecting and synthesising previous research on a specified topic (Snyder, 2019). The aim of this current literature review is to identify what is known, as well as unknown, about nurses' attitudes towards stimulation activities for persons with intellectual disability in mental health settings. In addition, the researcher aims to select an appropriate instrument for the study, and contrast the results of this current study with the existing literature (Brink et al., 2012).

Literature for this current study was accessed from the following data bases, namely, PubMed, Wiley Online Library, Science Direct, Elsevier, and Google Scholar. The terms used to narrow down relevant data for this study were: attitudes, psychiatric nursing, nurses, stimulation, activities, and intellectual disability. The research studies used for this literature review were dated between 2011 and 2019, as recently, scant publications on stimulation activities among nurses were available. In rare cases, the researcher also used articles that were published before 2007, because of the lack of recent publications that contained the information required.

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This current literature review, therefore, provides an overview of nurses' attitudes towards stimulation activities. The term, 'nurses', are used interchangeably in this current study and includes all nursing categories, namely: general, enrolled nursing assistants, and specialised nurses. The terms, 'persons' and 'people', are used interchangeably in the literature, and refer to persons and people with intellectual disability. Subsequently, the researcher opted to use the term, 'people with ID'. The terms, 'mental health care hospitals' and 'mental health care settings', are used interchangeably in the literature; however, for this current study the researcher opted to use the term, 'institution'.

The literature review is structured as follows: nurses' attitudes towards stimulation activities for people with intellectual disability; nurses' expectations about the use of, as well as the extent to which nurses use stimulation activities for people with intellectual disability; and

determining the factors that influence nurses' use of stimulation activities for people with intellectual disability.

2.2. Nurses' attitudes towards stimulation activities for people with intellectual disability

Literature and studies that have been conducted on institutionalised people with ID have produced varied results. The attitudes of nurses towards stimulation activities for people with ID are as follows:

2.2.1. Negative attitudes

Van der Linde (2014) conducted research with nursing staff, who attended to patients with profound intellectual disabilities in a long-term ward. The aim of the study was to determine the impact of a staff development programme on nursing auxiliary stimulation staff. The reason for the study was due to the low staff morale of the nursing auxiliary stimulation staff. The findings revealed how burnout and stress played a huge role in the attitudes of nursing auxiliary stimulation staff, who facilitated activities for patients with ID. The population for the study was twelve nursing auxiliary stimulation staff members, who worked in the ward providing direct care and executing the stimulation activity programme. The method for the study was a quantitative descriptive design, using a questionnaire pre- and post-stimulation intervention. The findings of the study revealed that negative attitudes were observed, as the staff felt insecure about providing activities to low functioning patients. Subsequently, they experienced burnout and stress when they realise that no training programme was available to the nursing staff. However, positive attitudes were observed with the implementation of a training programme, as well as sustained job satisfaction (Van der Linde, 2014).

In South Africa, Bhyat et al. (2014) conducted a research study to explore the perceptions of health care workers, who facilitated physical activity for patients with intellectual disability. Physical activity is identified as a stimulation activity according to Bhyat et al. (2014). The main aim of the study was to observe the effects of physical activity on intellectually disabled patients, through the eyes of health care workers, namely, nurses. The author employed a qualitative methodology and conducted in-depth interviews with four selected health care workers. The findings of the study revealed that it is unrealistic to implement a set physical activity schedule, as patients with intellectual disabilities are

unable to follow instructions completely, and would, for example, crawl, instead of walk, as per the instruction. The health care workers, working with intellectually disabled patients, indicated that they encouraged other activities, which stimulated fine motor skills, such as painting, or making necklaces from beads. The negative attitudes of the health care workers were related to acute intellectually disabled patients, who were bed ridden and could not perform activities. However, their responses were positive regarding the use of physical activity as a stimulation activity for patients with intellectual disability, as, according to them, the physical activity enhanced the mood of ID patients (Bhyat et al., 2014).

2.2.2. Positive attitudes

According to Van der Linde (2014), health care workers, namely auxiliary nurses, were positive about providing stimulation activities, once a staff development programme was implemented. The staff development programme allowed the staff to build confidence in facilitating stimulation activities, which generated a positive attitude. Additionally, a systematic review, conducted by Houwen et al. (2014), on empirical studies published between 1982 and 2012, was aimed at discovering evidence of the use of motor interventions, to improve cognitive, social, and motor outcomes for people with intellectual disability. Of the 295 articles identified, 46 met the inclusion criteria, covering a total of 45 studies. The main theme covered in these articles was behavioural techniques. Therefore, according to Houwen et al. (2014), the positive attitudes of the staff, who facilitated motor activities, emanated from the improvement of motorised abilities, observed in patients with intellectual disability.

In a study conducted by Sung et al. (2011), music therapy was offered to persons with dementia, in long term facilities. Of all the health care professionals, nurses are the majority of the health care personnel, and the most appropriate care providers, to conduct suitable stimulation activities on a daily basis, in addition to providing basic nursing care, such as personal hygiene care, among others. The findings revealed that the positive attitudes of nursing staff, play a vital role in the approach to stimulation activities, such as play and music therapy, to enhance motor skills and cognition (Sung et al., 2011). The reason for the inclusion of this study is, persons with dementia, as well as persons with intellectual disability, display similar characteristics, namely, decreased adaptive and cognitive functioning.

2.3. Nurses' expectations about the use of, as well as the extent to which nurses use stimulation activities for people with intellectual disability

The nurses' expectations about the use of stimulation activities differ, based on the literature and type of intellectual disability (Capri, 2016). The management of inpatient ID persons differs, depending on the degree of disability and cognition (Pelleboer-Gunnink et al., 2017). A study conducted in Ireland by the McCarron et al. (2018), alludes to the importance of intellectual disability nursing care, because the critical need for basic skills and psychological development stems from adequate nursing, as ID persons could spend their entire lifespan in hospital. These authors discuss the holistic approach of an integrated health system, not only focused on mental health, but the physical aspects also are taken into account (McCarron et al., 2018). In a study conducted by Sung et al. (2011), the use of music therapy in long term institutionalised persons with dementia is explored. The results revealed the nurses' role in the use of music therapy, to elicit cognitive changes (Sung et al., 2011). Similarly, a study on music therapy, conducted by Wells (2017), using persons with ID, provided positive outcomes of cognition, such as change in mood, thought, and behaviour. Visual imagery and pictorial cues, as forms of stimulation activity, facilitated by nurses in long term institutions, encouraged persons with intellectual disability to learn new skills, such as play and information processing, which decreased inappropriate behaviour (Hermansen, 2014). Wilson et al. (2019) investigated nurses' professional standards and role, as nurses working with intellectual disability. The results revealed the unique investment in the nurse/patient dyad; a bridge between disparate systems, and an ambiguous future. Nurses reported variable understanding of professional practice standards, designed for intellectual and developmental disability nursing, as well as acceptance of their importance in ID care. Recommendations from the study indicated that nursing care is significant for persons with intellectual disability (Wilson et al., 2019).

In South Africa, the care burden lies heavily on inadequate education and training, as well as the lack of resources (Capri, 2016). Understandably, knowledgeable nurses perform unseen, indispensable work, yet their voices are an under-researched topic, which ultimately, would have a direct effect on the organisational support and function of nursing people with ID (Capri, 2016). Specialised education and training focus on psychiatric nursing, and not on ID. Consequently, due to their inadequate understanding of ID in psychiatric hospitals, nurses often experience ambiguous sentiments regarding their role, which may foster complacency, disregard for treatment, and an ultimate no care attitude (Capri, 2016). In addition, Uys and Middleton (2014, p. 583) suggest that the earlier stimulation commences in a person with an

intellectual disability, the better the chance that s/he will live a normal life; being employed and even living independently. These authors further indicate that adequate goal directed programmes and services should be made available, for the optimum development of all identified people with an intellectual disability (Uys & Middleton, 2014, p. 53).

2.4. Factors that influence nurses' use of stimulation activities for people with intellectual disability

Based on the literature reviewed for this current study, the factors that influence nurse's use of stimulation activities for people/persons with intellectual disability were observed under three main topics, namely, lack of education, lack of resources, and lack of time.

2.4.1. Lack of education

Pelleboer-Gunnik et al. (2017) suggest that stigmatisation mainly occurs as a result of the lack of education in the care of people with disability. These authors searched five electronic databases, from January 1994 to January 2016, and compiled 2 190 articles. In the study, the authors explore the stigmatisation of nurses working in intellectual disability care, due to the lack of education. According to Capri (2016), nurses are not offered in-service training in intellectual disability care, which could foster complacency in the care provided.

Similarly, in a study conducted by Friese and Ailey (2015), the authors explore specified standards required for the nursing care of persons with intellectual disability. These authors highlight the lack of access to training and education to manage persons with intellectual disability, for nurses and other health care personnel. The findings revealed the need for nursing interventions, specified standards, training, as well as enhancement of communication, to ensure a safe environment for nurses and persons with intellectual disability.

A systematic review, conducted by Bakken and Sageng (2016), was aimed at reviewing empirical mental health nursing studies, which included adults with intellectual disabilities. The review included 137 articles, of which 16 were reviewed in full. The findings of this review revealed a lack of specialised education for nurses to treat patients with intellectual disabilities, as mental health nursing provided at a generalised level,

spanning across mental health, and not intellectual disability, specifically. In addition, the findings of this review revealed the need for nurse-patient communication to be adjusted to the patients' cognitive level. It was recommended that specialised education be enhanced for nurses, who manage patients with intellectual disability (Bakken & Sageng, 2016).

2.4.2. Lack of resources

In a study, conducted by Capri (2016), the discourse follows how nurses in South Africa are overworked and undervalued, and focuses on the lack of continuous development in the area of intellectual disability, as well as the consequent negative attitudes, which nurses display. Capri and Swartz (2018) assert that nurses are required to work 12 hour shifts, three to five days per week, during which they are responsible for basic nursing care, such as grooming, medication, daily orientation, as well as developing and building activity programmes. Most nurses, working with ID persons, are not specialised, and have general nursing qualifications, as upskilling of staff does not occur on a regular basis, due to a shortage in the current nurse-per-patient ratio. Specialty nurses have an advantage, in terms of ID care; however, they are few and far between, as the majority are general nurses (Capri & Swartz, 2018).

The lack of appropriate education and support is detrimental to nurses' health care, and may result in staff absenteeism; therefore, stimulation activities are not performed routinely. Nurses may face burn-out, due to staff shortages and the increased workload, which could influence their eagerness to conduct stimulation activities (Capri & Swartz, 2018).

2.4.3. Lack of time

Due to the increased care burden of staff to cover multiple roles, such as direct nursing care and indirect nursing care, nurses often do not find the time to provide stimulation activities (Capri & Buckle, 2015). Nurses are overworked and often experience burnout, which is usually due to a shortage of staff. Consequently, nurses are unable to provide stimulation activities, due to other daily tasks that they have to complete during a shift (Van der Linde, 2014). Pelleboer-Gunnink et al. (2017) concur that the shortage of staff, as well as the lack of education and training, result in insufficient time for nurses to provide stimulation activities over and above their daily tasks.

2.5. Summary

This chapter comprised of an in-depth written literature review, covering all existing information on stimulation activities for persons with intellectual disability, while highlighting significant gaps in the research of the topic under study. Nurses' attitudes toward providing stimulation activities for persons with intellectual disability, as well as the factors that influence nurses' ability to perform stimulation activities, are clearly defined.

In the following chapter, the researcher presents the Research Methodology of this current study.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

In this chapter, the research methodology that was followed to achieve the objectives of this current study is described. A research methodology is defined as the process, or plan to conduct the specific steps of the study (Grove et al., 2012). The following elements of the research methodology are discussed: research approach; research design; setting; population; sampling and sample; inclusion and exclusion criteria; data collection instrument; validity and reliability of the data collection instrument; data collection process; data analysis; and ethical considerations.

3.2. Research approach

The research approach is referred to as a procedure, which a researcher follows when conducting a study, and includes methods of data collection and analysis (Duckett, 2021). A quantitative research approach was selected for this current study. Quantitative research is defined as the investigation of phenomena that is responsive to precise measurement and quantification, often involving a rigorous and controlled design (Rutherford-Hemming & Feliciano, 2015). Nurses' attitudes towards stimulation activities could be measured and quantified; therefore, the quantitative research approach was employed, using questionnaires to collect the data, which were analysed through the Statistical Package for Social Sciences (SPSS), version 27, a statistical programme.

3.3. Research design

Descriptive study design is a variety of designs, developed to gain more information about characteristics within a particular field of study, and provide a picture of situations as they naturally happen (Brink et al., 2012). This design was used because information about the attitudes and uses of stimulation activities occur naturally. A descriptive, survey design was selected for this current study. In survey research, face to face interviews, telephonic interviews, or questionnaires, are usually used. This type of data involves obtaining information about the beliefs, opinions, experiences, and characteristics of one or more groups of people

(Duckett, 2021). The researcher used a descriptive survey design to obtain information about nurses' attitudes and use of stimulation activities for people with ID. By using questionnaires to obtain the data, the researcher could quantify the data through statistical analysis.

3.4. Setting

The setting for this current study is the setting in which the researcher obtained the data (Duckett, 2021), being one of four psychiatric hospitals in the Western Cape, South Africa. The selected psychiatric hospital, the largest in the Western Cape, is situated in the Cape Town suburb of Lentegeur, Mitchells Plain, on an area of 104 hectares, with an estimated population size of 290,000 to 305,000 people, of which 90.8% are classified coloured, according to the racial profile. The area is a low socio-economic area, where poverty, gangsterism, as well as alcohol and substance abuse is increasingly high, with informal settlements occupying large parts of urban land. Population (Marinus et al., 2011).

The selected psychiatric hospital has a bed capacity of 722 and a total of 31 wards, of which 10 wards and 1 clinic cater for 370 people with intellectual disability (Marinus et al., 2011). It has four clinical functional business units (areas of psychiatry), namely, a child and adolescent psychiatry unit, a forensic psychiatry unit, an intellectual disability services unit, and a general adult psychiatry unit. The intellectual disability services unit is the largest functional business unit, followed by the general adult psychiatry, forensic psychiatry and the child and adolescent psychiatry units (Marinus et al., 2011). Mental health care users (MHCU) suffering from a range of mental illnesses and intellectual disorders are admitted voluntarily, involuntarily, or as assisted, in accordance with the Mental Health Care Act (RSA, 2002).

The selected psychiatric hospital was constructed more than two decades ago, with 44 buildings, comprising 33 clinical wards and support facilities (Marinus et al., 2011). The hospital employs 721 individuals in total (Marinus et al., 2011). The hospital services the population of the surrounding areas, as well as rural areas (Annexure C).

3.5. Population and sample

In this section, the population, sampling technique, and sample, as well as the inclusion and exclusion criteria are discussed.

3.5.1. Study population

The population is the entire group of persons or objects that is of interest to the researcher (Brink et al., 2012). The population of this study was all 168 nurses, working in the wards, in which care is provided to people with ID, at the selected psychiatric hospital. The population included 17 advanced psychiatric professional nurses, 40 general professional nurses, 27 enrolled nurses, and 84 enrolled assistant nurses, attending to persons with ID.

3.5.2. Sampling and sample size

Sampling is the researcher's process of selecting the sample from a population, in order to obtain information regarding the phenomenon, in a way that represents the population of interest (Snyder, 2019). Convenience sampling was employed in this current study. Convenience sampling is a type of non-random sampling, where members of the target population, who meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate, are included for the purpose of the study (Etikan et al., 2016). A sample is a part or fraction of a whole, or a subset of a larger set, selected by the researcher to participate in a research study (Brink et al., 2012).

3.5.3. Inclusion criteria

Inclusion criteria are the requirements, set by the researcher, which prospective subjects must meet, in order to be part of the sample (Brink et al., 2012). All categories of nurses were used for this current research study, namely, advanced psychiatric nurses, general professional nurses, enrolled nurses, and enrolled nursing assistants, who were rendering direct nursing care to persons with intellectual disability.

3.5.4. Exclusion criteria

Exclusion criteria are requirements, set by the researcher, which exclude respondents from being part of the sample (Duckett, 2021). The director of nursing, area managers, operational managers, occupational health and safety sister, and the clinical coordinator, were excluded, as they were not involved in direct nursing care.

3.6. Data collection

Data collection is defined as a process of gathering information, to address a research problem (Brink et al., 2012). The data collection instrument, validity and reliability of the instrument, and data collection process, are discussed in this section.

3.6.1. Preparation for data collection

Due to the SARS COVID-19 Pandemic, the following protocols were adhered to:

- Staff were monitored for flu-like symptoms upon starting the shift; any staff member, who felt ill, were not allowed to continue working, unless negative for COVID-19.
- Masks were worn at all times; masks were compulsory and worn throughout information and data collection sessions.
- Hand sanitisation was performed before distribution of the questionnaires.
- All questionnaires were distributed in clear sleeves, in order to sanitise the sleeve when handling.
- Hand and surface sanitisers were used during the handling of these questionnaires, before and after completion.
- Each respondent was given a separate pen to prevent any cross infection.
- Individually wrapped sweets were distributed to each respondent, as a 'thank you' gift.

3.6.2. Data collection instrument

A data collection instrument refers to a tool used to gather information in a research study (Brink et al., 2012). The instrument used to collect data in this current study was a structured questionnaire. A structured questionnaire is defined as a self-report tool (Annexure E), with respondents responding to set questions (Brink et al., 2012). An existing, adapted, 5-point Likert scale, 20-itemed, self-administered structured questionnaire, consisting of two sections, was used to achieve the aim of this current study. The original questionnaire was developed by Kemper et al. (2004) for the purpose of identifying staff attitudes towards the use of music therapy for premature infants. The second part of the questionnaire was adapted from the study about music therapy for

persons with dementia (Sung et al., 2011). Subsequently, this questionnaire was adapted by changing the wording from 'dementia' and 'music therapy' to 'intellectual disability' and 'stimulation activities'. This adaptation was implemented, as the conditions for data collection were similar.

The number of questions on the questionnaire changed from 23 to 24 items: Section A comprised demographic data (4 items), while Section B consisted of three domains that comprised 20 items/questions in total. The following question was added: Stimulation activities done daily. Approximately 10 - 15 minutes was required to complete the entire questionnaire. The instrument is freely available to use. **Section A** involved four questions on gender, age, nursing category, and years of experience at the selected facility. **Section B** involved questions regarding attitudes and expectations about the use of stimulation activities for people living with intellectual disability. It was divided into three domains, which were categorised as follows:

- Domain 1: experience and use of stimulation activities (Questions 1-7).
- Domain 2: use of stimulation activities (Questions 8-14).
- Domain3: factors that influence the use of stimulation activities (Questions 14-20)

The questionnaire was adapted, from the original questionnaire with 23 items, to 24 items, through which the nursing staff's attitudes towards the effect of stimulation activities, as well as their expectations about the use of stimulation activities, were explored. Each item was rated on a five-point Likert scale, from *strongly disagree* (1), to *strongly agree* (5). The respondents could select any of the five options on the Likert scale, with the total score ranging from 23 to 115.

3.6.3. Validity/Reliability

Validity is defined as the ability of an instrument to measure the variable that it is intended to measure (Brink et al., 2012). Content validity is an assessment of how well the instrument represents all the components of the variable to be measured (Brink et al., 2012). The questionnaire was handed to the study supervisor, an expert in mental health, to ascertain content validity. Table 1 depicts how the objectives were attained, according to the items on the adapted questionnaire.

Internal consistency is usually evaluated by calculating the Cronbach's Alpha coefficient, which is also known as coefficient alpha (Polit & Beck, 2010). In this current study, Cronbach's Alpha was used to determine the reliability of the instrument. Cronbach's Alpha is an extensively utilised reliability index that calculates the internal consistency of a measure, consisting of various sections (Polit & Beck, 2010). Cronbach Alpha for this current study was 0.8132.

The questionnaire used for this current study was an adaptation of the original one, developed by Kemper et al. (2004) and Sung et al. (2011). The reason for this adaptation was because persons with dementia have a decreased level of functioning, which is directly similar to persons, who suffer from intellectual disability.

Participant ID	Simulation: mood	Simulation: spirits, energy, vitality	Simulation: growth recovery	Simulation: relieve pain	Simulation: fake	Simulation: higher functioning	Simulation: worthless when sick	Simulation: promote motor function	Simulation: enhance memory	Simulation: promote listening	Simulation: alleviates boredom	Simulation: daily	Simulation: differ	Simulation: outcome changes recorded	Lack knowledge skills	Lack training	Lack time	Lack resources	Lack confidence		Total
NX1		5	4	4	2	2	2	4	4	4	5	4	4	2	4	4	4	4	4	1	67
NX2	5	5	5	5	1	2	2	5	5	5	5	2	2	4	4	24	4	4	3	3	75
NX3	3	4	4	3	2	3	4	5	4	3	4	1	1	3	3	3	4	5	4	3	66
NX4	1	1	1	1	2	4	1	1	1	1	1	1	1	5	3	3	4	3	5	3	43
NX5	5	5	4	5	1	3	5	5	5	4	5	5	5	4	4	2	5	5	4	4	85
NX6	5	5	4	4	1	1	3	4	4	4	3	3	3	3	4	4	2	2	4	5	68
NX7	4	4	3	4	2	5	4	4	4	4	4	4	3	4	2	2	4	4	2	2	69
NX8	5	5	4	5	1	1	2	5	2	5	5	3	3	5	3	3	3	3	1	2	66
NX9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60
NX10	4	4	4	4	1	1	2	4	4	4	4	4	4	4	4	3	3	3	3	3	67
																					113,1556
	1,8611111	1,655555556	1,155555556	1,511111111	0,488889	1,833333333	1,511111	1,555556	1,6	1,34444	1,655556	1,77778	1,655556	0,9	0,488889	0,544444	0,711111	0,933333	1,344444	1,21111111	25,73889
																				Cronbach's α=	0,813195

 Table 3.1: Validity table

3.6.4. Data collection process

The data collection process is a formal procedure followed to obtain data (Wikler, 2010).
The data were collected after ethics approval was obtained from the Research Ethics Committee of the University of the Western Cape [UWC] (Annexure A), and permission to conduct the study at the selected psychiatric hospital was obtained from the Western Cape Department of Health [WCDoH] (Annexure B). The researcher visited the wards of the selected psychiatric hospital, and requested permission from the operational manager of each ward, for access to collect data. The visits were scheduled for times when the wards was not too busy, for example, during lunchtime, or on weekends, to avoid interfering with the routine of the nurses, which might jeopardise the care of the persons with ID. Subsequently, the researcher addressed all the nursing staff in the ward to establish a suitable time to explain the study and distribute questionnaires. The nurses were addressed in the nurses' station, tearoom, or conference room of the ward, depending on which venue was convenient for the nursing staff.

Once the date, time, and venue were agreed upon, the following information about the study was imparted: title of the study; aim of the study; potential benefits of the study; risks of the study; time commitment for participation; procedure that would be followed during data collection; anonymity of the questionnaires; confidentiality of the data gathered; offer to answer/clarify questions in the questionnaire; voluntary consent to participate in the study; option to withdraw from participation in the study, without providing reasons, or being penalised; approval of the study, obtained from the UWC ethics committee and the Western Cape DoH; as well as how to complete the questionnaire. The nursing staff were given the opportunity to ask questions, as well as deliberate on whether to participate in the study or not. The nursing staff, who voluntarily decided to participate, were provided with an information sheet (Annexure D) to read, consent forms (Annexure F) to sign, and questionnaires (Annexure E) to complete. The study was clarified in the information sheet; signing the consent form confirmed that the respondent understood what the study was about and was willing to participate; and the questionnaire was the data collection tool. The researcher left the questionnaires, information sheets, and consent forms with the respondents, to allow them enough time to read the information sheet, sign the consent forms, and complete the questionnaires. Each respondent was provided with an unmarked envelope, into which to insert the completed questionnaire and consent form, while a box with a slit was provided in each ward for the envelopes, with completed questionnaires and signed consent forms, to be inserted into, to ensure anonymity. The researcher collected the boxes from the various

wards on a weekly basis, or over a period of 8 weeks, upon advice by the respondents. Data collection occurred between June and August 2021.

3.7. Data analysis

Data analysis is an orderly organisation and synthesis of research data, as well as the testing of hypotheses in quantitative studies, using this data (Brink et al., 2012, p. 35). After data collection, the questionnaires were numbered to identify each of them. A code book (Annexure G) was created for data to be captured in SPSS version 27, using codes. A codebook is a listing of a set of numbers, which the researcher chose to apply to responses acquired from the respondents, as they responded to each item (DeCuir-Gunby et al., 2011).

Before data analysis, the data were checked for errors, and cleaned. The errors were checked by searching for values that did not fall within the range of possible values of the variables. For categorical variables (gender, race, rank, and functional business unit), the minimum and maximum values were checked to assess whether they fell within the range of possible values for a variable, and if not, were corrected. For continuous variables (age and years of experience), the minimum, maximum, and mean were checked, and if there was an out of range value, a correction was done. The data were captured into SPSS, version 27. After capturing the data, a statistician was consulted to assist with the data analysis.

3.8. Ethics

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Ethics approval was obtained from the Bio Medical Research Ethics Committee at the University of the Western Cape and the Department of Health (Annexure A). A letter requesting permission to conduct the study at the selected hospital and access the staff, was sent to, and permission granted by, the Western Cape Department of Health. The following ethics considerations were applied in this current study:

• *Respect for persons:* The respondents were advised that had the right to selfdetermination, implying that they were allowed to make their own decisions regarding participation in this study, which was voluntary, with a right to withdraw from the study at any time, without providing reasons, or suffering any penalty. Additionally, they had the right to decline the provision of any information, as well as the right to request an explanation regarding the aim of the study (Brink et al., 2012, p. 35). Not only did the above-mentioned apply to this current study, but consideration was crucial regarding

the fact that the respondents were nurses, who worked with intellectually disabled persons with decreased self-determination, and therefore, in need of additional protection (Brink et al., 2012, p. 35). Because this current study deals with persons, who are intellectually disabled, respect and dignity are often overlooked. Consequently, the respondents were reminded that they have a right to refuse to provide information, to ask for clarity regarding the study, and that their participation in the research study was completely voluntary (Brink et al., 2012).

• *Justice:* Each respondent was treated equally, fairly, and not discriminated against because of their different ranks, level of education, race, or any other factors (Brink et al., 2012, p. 37). All respondents were selected to participate in this current study. The researcher respected the respondents' right to privacy, by ensuring that their private information would not be disclosed to irrelevant individuals. The questionnaires bore no identifying details of the respondents, instead a unique identifier was used to identify the questionnaires. After the questionnaires were completed, and they were collected, placed in a closed box, and locked in a room, to which only the researcher had access (Priph et al., 2012)

(Brink et al., 2012).

• *Informed consent:* This takes place when a respondent gives consent for the researcher to utilise his/her knowledge of a phenomenon, for the purposes of the study (Brink et al., 2012, p. 38), subject to him/her receiving clear and complete information about participation in the study, in verbal and/or written form. Once the respondents fully understood the relevant information, they were allowed to decide whether or not to participate in the study. Subsequently, all those, who voluntarily decided to participate, signed the consent form.

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• *Beneficence:* This can be defined as actions performed for the benefit of others (Brink et al., 2012, p. 35). The right of the respondents to be protected from harm and discomfort is vital (Brink et al., 2012, p. 35). All research carries risk; however, minimal risk was anticipated during the study. The researcher prearranged that, should any of the respondents be traumatised by the research process, they would be referred for free counselling services at the Independent Counselling and Advisory Services (ICAS). Fortunately, none of the respondents reported any traumatization during and after the completion of the questionnaires. The name of the hospital was not disclosed in the study to avoid causing harm to the reputation or image of the hospital (Brink et al., 2012). After a period of five years, data used for this current study would be destroyed.

3.9. Summary

In this chapter, the following topics were addressed, namely, research approach, research design, setting, population, inclusion criteria, exclusion criteria, sampling and sample, data collection instrument, validity of the instrument, reliability of the instrument, data collection process, data analysis, and ethics.

The following chapter comprises the research findings of this current study.



CHAPTER FOUR

RESEARCH FINDINGS

4.1. Introduction

In this chapter, the research findings, based on the data collected from the questionnaire administered to respondents that were analysed, are presented systematically. The results are presented as appropriate tables, bar graphs, and charts, in the order that the questions were designed to investigate nurses' attitudes towards stimulation activities, and the use thereof for people with intellectual disabilities (ID) at a selected psychiatric hospital in the Western Cape Province of South Africa. To achieve this aim, the following objectives were identified:

- Investigate nurses' attitudes towards stimulation activities for people with ID.
- Evaluate nurses' expectations about the use of stimulation activities for people with ID. •
- Assess the extent of the use of stimulation activities for people with ID by nurses. •
- RIN. Determine the factors that influence nurses' use of stimulation activities for people with ID.

4.2. Demographic data of the respondents **INIVERSITY** of the

The demographic data in this current study include the age, gender, race, nursing qualifications, and years of experience of the respondents. Eighty-five (85) nurses of the 168 at the psychiatric hospital, participated in this current study, yielding a response of 50.5 %. Less than a third of the respondents were between the ages of 31 and 40 years (30%; N=25), closely followed by those between 41 and 50 years (29%; N=24), as displayed in Table 4.1. Slightly less than a quarter of the respondents were between 51 and 60 years (24%; N=20), followed by those between 21 and 30 years (15%; N=12), while only 2.4% (N=2) were older than 60 years. The respondents' ages ranged between 22 and 66 years, with an average (± standard deviation) age of 42.8 (±10.7) years.

In terms of gender distribution, the vast majority of the respondents in this current study was female (88%; N=75), which is common in the nursing profession.

Age in years (N=83)	Frequency	Percentage			
21 – 30	12	14.5%			
31 – 40	25	30.1%			
41 – 50	24	28.9%			
51 – 60	20	24.1%			
61 – 70	2	2.4%			
Gender (N=85)					
Male	10	11.8%			
Female	75	88.2%			

Table 4.1: Age, gender and race distribution of respondents

In this current study, more than half (56.5%; N=48) of the respondents were Enrolled Nurse Assistants (Figure 4.1). This nursing category was followed by the Enrolled Nurses, who constituted 26% (N=22) of the total respondent sample, and the General Professional nurses at 11% (N=9). Specialised professional nurses (5.9%; N=5) completed the list, while one (1) nurse chose not to disclose this information. In addition, these nurses revealed the number of years of experience they had, working with intellectually disabled people, as illustrated in Figure 4.2. In this regard, most (37%; N=31) had less than 5 years of experience, followed by those with 6-10 years (27%; N=23), more than 20 years (19%; N=16), and 11-15 years (12%; N=10) of experience. Finally, only 6% (N=5) had between 16 and 20 years of work experience with intellectually disabled people.



Figure 4.1: The nursing categories of respondents



Figure 4.2: Respondents' years (y) of experience working with intellectually disabled people

4.3. Attitudes of nurses towards stimulation activities for people with ID

Questions were posed to determine the attitudes of nurses towards the use of stimulation activities for people with ID, as depicted in Figures 4.3 & 4.4. Most of the nurses had positive attitudes towards the use of stimulation activities, as their responses were overwhelmingly positive ('Strongly agree' and 'Agree'). Approximately 92% (N=77) and 88% (N=75) opined that stimulation activities could improve mood, as well as lift spirits and boost the energy and vitality of people with ID, respectively (Figure 4.3).



Figure 4.3: Positive attitudes of nurses towards stimulation activities

Additionally, some respondents (81%; N=69) also believed these activities could enhance the patients' growth, recovery from injury and illness, as well as relieve their pain.

To further affirm the dominance of the positive attitudes among respondents in this current study, most of the nurses also provided negative responses ('Strongly disagree' and 'Disagree') to the negative attitude questions. As illustrated in Figure 4.4, most of the respondents did not regard the stimulation activities as fake (85%; N=72), or only successful with higher functioning ID persons (54%; N=46). Additionally, slightly more than a third of the respondents doubted that the stimulation activities were worthless, when the person is very sick (35%; N=30), although slightly less than a third (32%; N=27) had a positive ('Strongly agree' and 'Agree') opinion. The debate on this question could also be observed by the many respondents (33%; N=28), who were undecided ('Neutral').



Figure 4.4: Negative attitudes of nurses towards stimulation activities

4.4. Expectations of nurses on the use of stimulation activities for people with intellectual disability

In this current study, most of the respondents had positive ('Strongly agree' and 'Agree') expectations of the impact of stimulation activities on people with ID (Figure 4.5). They were of the opinion that these activities would promote motor function, listening, and instruction (87%; N=74), enhance memory (82%; N=70), and alleviate boredom (84%; N=71) in these persons.



Figure 4.5: Expectations of nurses towards stimulation activities

4.5. Extent of use of stimulation activities for people with intellectual disability

Regarding the actual day-to-day implementation of stimulation activities for people with ID, a simple majority of the respondents in this current study expressed positive ('Strongly agree' and 'Agree') views, as presented in Figure 4.6.



Figure 4.6: Extent of nurses' use of stimulation activities for people with ID

Slightly less than half of the respondents reported that stimulation activities are conducted daily (49%; N=42) for intellectually disabled people, with different activities performed each day (58%; N=49). More than half (67%; N=57) of the respondents reported any outcome, or changes obtained in the intellectually disabled people following stimulation activities, which were also being recorded. However, about 33% (N=28) were unsure ('Neutral') about the extent of the use of the stimulation activities.

4.6. Factors influencing the nurses' use of stimulation activities for people with intellectual disability

Some factors that may influence the decision of nurses to employ the use of stimulation activities for people with ID were explored in this current study, and the responses are depicted in Table 4.2. The cumulative responses were largely inconclusive, almost divided equally between the 39% (N=33) positive ('Strongly agree' and 'Agree'), and the 36% (N=31) negative ('Strongly disagree' and 'Disagree') opinions, while 26% (N=22) were unsure ('Neutral'). However, more than half of the respondents in this current study identified the lack of relevant resources in the facility (54%; N=46), while insufficient time was reported by less than half of the respondents (40%; N=34), and slightly more than a third of the respondents reported the lack of adequate knowledge and skills (35%; N=30), which may influence their use of stimulation activities. Most of the respondents reported a desire to, learn (61%; N=52), have the confidence to practice (42%; N=36), and receive training (40%; N=34), respectively, to use stimulation activities for people with ID. **VERSITY of the**

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 Table 4.2: Factors influencing the choice to use stimulation activities for people with intellectual disability

	Responses % (N)					
Factors	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Lack of knowledge and skills	8.2% (7)	23.5% (20)	32.9% (28)	25.9% (22)	9.4% (8)	
Lack of training	9.4% (8)	30.6% (26)	25.9% (22)	25.9% (22)	8.2% (7)	
Lack of time to provide stimulation activities	4.7% (4)	30.6% (26)	24.7% (21)	28.2% (24)	11.8% (10)	
Lack of relevant resources in the facility	3.5% (3)	18.8% (16)	23.5% (20)	36.5% (31)	17.6% (15)	
Lack of confidence to practice	18.8% (16)	23.5% (20)	28.2% (24)	22.4% (19)	7.1% (6)	
Do not wish to learn	21.2% (18)	40.0% (34)	18.8% (16)	5.9% (5)	14.1% (12)	

4.7. Correlation analyses between the main domains

The Chi-square and Pearson's correlation analyses were selected to understand the possible relationships between the various questionnaire-domains identified in this current study. The result of the Chi-square analysis revealed significant (p<0.0001) associations among all the main themes in this current study, while Table 4.3 presents the respective Pearson's correlation coefficient, R^2 and their p-values.

The positive attitudes of nurses towards the use of the stimulation activities for people with intellectual disability in this current study were observed to be strongly and significantly ($R^2=0.998$; p<0.05) associated with the expectations of the impact of these activities. Positive attitudes were also strongly related ($R^2=0.839$) to the extent of the use of stimulation activities, and weakly related ($R^2=0.664$) with the professional category of the nurses.

On the other hand, the negative attitudes towards the use of the stimulation activities were inversely associated, though not statistically significant (R^2 =-0.719; p>0.05) with the expectations of their impact on people with ID. The age categories of the respondents were, however, directly related (R^2 =0.682) to the negative attitudes towards the use of stimulation activities.

The expectations of the impact of the stimulation activities on people with intellectual disability in this current study were also directly associated ($R^2=0.852$) with the extent of the use of stimulation activities, as well as with the nursing categories ($R^2=0.704$), although both did not reach statistical significance. The extent of the use of stimulation activities, however, was strongly and significantly linked ($R^2=0.894$; p<0.05) to the professional nursing categories of respondents.

Finally, the factors that may affect the use of stimulation activities for people with intellectual disability were strongly associated (R^2 =0.920) with the ages of respondents in this current study, which relationship reached statistical significance (p<0.05). These factors may also be weakly related to the extent of use of stimulation activities (R^2 =0.519), as well as the nursing categories of respondents (R^2 =0.516).

Table 4.3: Pearson's correlation analyses of the cumulative responses to the main themes

	Positive attitudes towards the use of stimulation activities	Negative attitudes towards the use of stimulation activities	Expectations on the use of stimulation activities	Extent of the use of stimulation activities	Factors influencing the use of stimulation activities	Age of respondents	Nursing category of respondents
Positive attitudes towards the use of stimulation activities		-0.753 (0.1418)	0.998 (0.0001)*	0.839 (0.0759)	-0.005 (0.9933)	-0.246 (0.6903)	0.664 (0.2213)
Negative attitudes towards the use of stimulation activities	-0.753 (0.1418)		-0.719 (0.1714)	-0.430 (0.4696)	0.411 (0. <i>4</i> 919)	0.682 (0.2045)	-0.105 (0.8666)
Expectations on the use of stimulation activities	0.998 (0.0001)*	-0.719 (0.1714)		0.852 (0.0671)	0.014 (0.9821)	-0.209 <i>(0.7363)</i>	0.704 (0.1845)
Extent of use of stimulation activities	0.839 <i>(0.0759)</i>	-0.430 (0.4696)	0.852 (0.0671)		0.519 (0.3700)	0.299 (0.6255)	0.894 (0.0407)*
Factors influencing the use of stimulation activities	-0.005 <i>(0.9933)</i>	0.411 (0.4919)	0.014 (0.9821)	0.519 (0.3700) S	f the	0.920 (0.0268)*	0.546 (0.3408)
Age of respondents	-0.246 (0.6903)	0.682 (0.2045)	-0.209 (0.7363)	0.299 (0.6255)	0.920 (0.0268)*		0.496 <i>(0.3953)</i>
Nursing category of respondents	0.664 <i>(0.2213)</i>	-0.105 (0.8666)	0.704 (0.1845)	0.894 (0.0407)*	0.546 (0.3408)	0.496 (0.3953)	

Data are presented as Pearson's correlation coefficient – R² value (p-value). Symbol (*) signifies statistical significance when p<0.05.

4.8. Summary

In this chapter, the summary of the research findings, based on the data collected from the questionnaire administered to respondents, were analysed, and presented systematically. Pie charts and histograms were used to illustrate the data and analyses. The Pearson's correlation analyses of responses was conducted and represented in a table, to indicate statistical significance. In the following chapter, a discussion of the findings is presented.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1. Introduction

In this chapter, the correlations between the positive attitudes and stimulation activities, as well as the negative attitudes and stimulation activities are discussed initially. Thereafter, the factors that influence nurses' use of stimulation activities are presented.

5.2. Correlations between positive attitudes and stimulation activities

The findings of this current study revealed that the positive attitudes of nursing staff yielded positive outcomes from the activities provided for persons with intellectual disability. These findings are consistent, as the positive attitudes of staff members yield greater positive outcomes. According to the Pearson's correlation and Chi Square analysis (R^2 =0.998; p<0.05) this finding reveals the significant association with the expectations of the impact of these activities. Positive attitudes were also strongly related (R^2 =0.839) with the extent of the use of stimulation activities, and weakly related (R^2 =0.664) with the professional category of the nurse.

The positive attitudes of nursing staff play a vital role in the approach to stimulation activities, such as play and music therapy, which enhance motor skills and cognition (Sung et al., 2011). Similar findings were reported by Houwen et al. (2014), a systematic study that was conducted by using four data bases, namely MEDLINE, PsycINFO, Eric, and Cinhal. The aim of the study was to review evidence of a total sample of 295 articles.

Of the articles, 46 met the inclusion criteria, covering 45 different studies (behavioral techniques; N = 21, and without assisted technology; N = 15). Twenty per cent of the 45 articles reported using theoretical frameworks. A total of 38 articles reported improvement in basic motor skills, with eight articles reporting improvement of recreational, and/or specialist motor skills. Consequently, for the health care professionals, performing the daily repetitive motor tasks improved the cognition of persons with ID, implying that the improved cognition was indicative of the improved attitudes of the staff.

5.3. Correlations between negative attitudes and stimulation activities

The findings, regarding negative attitudes towards the use of stimulation activities, were associated with, but not statistically significant for, the expectations of their impact on people with ID, as per the value (R^2 =-0.719; p>0.05). According to the data analysis, the findings yielded the outcome that the age categories of the respondents were directly related (R^2 =0.682) to negative attitudes about the stimulation activities provided. It could be concluded, therefore, that negative attitudes are directly related to the age of the nurses, who provide the activities, as well as their nursing categories.

A study conducted by Van der Linde (2014) in South Africa, which was aimed at exploring the impact of a staff development programme for auxiliary nurses, who performed stimulation activities for patients with intellectual disability, is directly related to the data analysis of this current study. A sample of 12 female auxiliary nurses were selected to achieve the aim of the study (Van der Linde, 2014). The findings of that study revealed an increase in positive attitudes and job satisfaction, when staff were trained to perform the appropriate activities. In addition, the findings revealed that the lack of resources and training of auxiliary nurses to provide activities to intellectually disabled patients, resulted in the negative attitudes of the auxiliary nurses, as well as decreased job satisfaction (Van der Linde, 2014).

Additionally, a study conducted by Capri and Buckle (2015) was aimed at exploring nurses' attitudes and experiences, while working with intellectual disabled patients. Sixteen free association narrative interviews were conducted with the study sample. The findings revealed that nurses, working in long-term ID institutions, felt coerced into conducting stimulation activities, because of the care burden that was placed on nurses, due to staff shortages, as well as that, being in paid employment, left them no choice. System fatigue played a major role in the provision of nursing care (Capri & Buckle, 2015).

Appelgren et al. (2018) conducted a study, by means of a systematic review and metaethnography, to synthesize qualitative research studies, located in the PubMed, CINAHL, PsycINFO, and ERIC databases. These authors selected eighteen published studies, from eight countries, involving 190 registered nurses. Their findings revealed that the negative attitudes of nurses could result in poor patient care, which could severely undermine the ability of the health system to provide quality care, and improve patient outcomes (Appelgren et al., 2018).

In that study, the researchers observed a lack of awareness and knowledge in the provision of treatment and care for patients with intellectual disabilities.

5.4. Factors that influence nurses' use of stimulation activities

According to the analysis of the data, the extent to which stimulation activities are used, yielded a strong relation of 49%. The nurses were of the opinion that stimulation activities were conducted daily (49%; N=42) for intellectually disabled people, with different activities being performed each day (58%; N=49). However, 54% of the nurses reported a lack of resources required to conduct stimulation activities.

The findings of the data relating to the factors that influence the nurses' use of stimulation activities, are quite similar to those of a study conducted by Capri and Buckle (2015). The aim of that study by Capri and Buckle (2015), was to explore nurses' attitudes and experiences, using an exploratory, descriptive, interpretivist method. Sixteen free association narrative interviews were conducted, and the findings reflected system fatigue, care burden, and the lack of resources. Additionally, the study findings of Van der Linde (2014) revealed that nursing auxiliary staff, who provided stimulation activities to intellectually disabled patients, required specialised training, which would enable them to conduct the activities. Similarly, the findings of a study conducted by Wells (2017) revealed the need for specialised education and nursing programmes, to equip nurses, who work with intellectually disabled patients.

5.5. Summary

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In this chapter, the data of this current study was discussed under the two headings, namely, correlations between positive attitudes and stimulation activities, and the correlations between negative attitudes and stimulation activities. Thereafter, the factors that influence nurses' use of stimulation activities were presented. The use of Chi Square analysis and Pearson's correlation were used to identify significance and correlation.

In the following, and final, chapter, the researcher presents the conclusion, limitations, and recommendations of this current research.

CHAPTER SIX

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1. Introduction

The aim of this current study was to investigate nurses' attitudes towards, as well as the use of stimulation activities for people with intellectual disability at a psychiatric hospital in the Western Cape. The objectives of this current study were to investigate nurses' attitudes towards stimulation activities for people with intellectual disability (ID), to evaluate nurses' expectations about the use of stimulation activities for people with ID by nurses, and to determine the factors that influence nurses' use of stimulation activities for people with ID by nurses, and to determine the factors that influence nurses' use of stimulation activities for people with ID. The findings of this current study suggest that the adapted questionnaire used, was useful in determining the objectives of this study. In this chapter, the researcher summarises how the objectives of this current study were fulfilled. The limitations and recommendations are also presented, based on the findings of the study.



6.2. Summary

In summary, the objectives of this study were met as follows:

- Positive attitudes towards the use of stimulation activities were identified in 92% of the respondents' feedback, which indicates that nurses are positive about the use of stimulation activities for patients with intellectual disability.
- Regarding nurses' expectations about the use of stimulation activities, they were of the opinion that these activities would promote motor function, listening, and instruction (87%; N=74), enhance memory (82%; N=70), and alleviate boredom (84%; N=71). These values indicate that nurses had optimistic expectations about the value of these stimulation activities for patients with intellectual disabilities.
- The factors that influence nurses' use of stimulation activities were related to the lack of education, training, resources, and time. More than half of the respondents identified the lack of relevant resources in the facility (54%; N=46), while insufficient time was reported by less than half of the respondents (40%; N=34). In addition, the respondents

reported the lack of adequate knowledge and skills (35%; N=30), which could influence their use of stimulation activities. Most of the respondents reported a desire to, learn (61%; N=52), have the confidence to practice (42%; N=36), and receive training in (40%; N=30), respectively, the use stimulation activities for people with ID. These values are indicative of the need to receive adequate training, education, and resources, to ensure that stimulation activities are provided.

6.2.1. Nurses' attitudes towards stimulation activities for people with ID

Firstly, a positive correlation was observed between attitudes and stimulation activities, related to profession and years of experience. Positive attitudes were perceived in the respondents' observations of change in people with ID, related to upliftment of mood, boosting of spirits, and overall increased vitality, which could enhance growth and recovery. Negative attitudes were associated with the time needed to perform these activities, age, as well as the lack of education and skills.

6.2.2. Nurses expectations about the use of stimulation activities

The expectations of the impact of the stimulation activities on people with ID in this current study were also directly associated ($R^2=0.852$) with the extent of its use, as well as with the nursing categories ($R^2=0.704$), although both failed to reach statistical significance. However, the extent of the use of stimulation activities was strongly and significantly linked ($R^2=0.894$; p<0.05) to the professional nursing categories of respondents. Overall, the respondents displayed a positive outlook on expectations, and were of the opinion that stimulation activities alleviated boredom, promoted and enhanced motor function, as well as listening skills.

6.2.3. To what extent do nurses use stimulation activities for persons with ID

Professional nurses reported the use of stimulation activities on an almost daily basis, and the findings/changes were documented. Overall, more than half of the respondents (67%; N=57) acknowledged the use of stimulation activities, which implied that the significant use of stimulation activities, yielded significant results.

6.2.4. Determine factors that influence the use of stimulation activities

The following factors, namely, resources, time, and education of staff, influence the activities provided, as well as the frequency thereof. More than half of the respondents

(54%; N=46) reported the lack of education and resources, while less than half of the respondents (42%; N=36) reported the lack of confidence to perform activities, and insufficient time (40%; N=34), respectively. Slightly more than a third (35%; N=30) of the respondents indicated a lack of skills and knowledge, which could influence the use of stimulation activities. However, most of the respondents (61%; N=52) reported the desire to learn, as a factor to influence the use of simulation activities in people with ID.

6.3. Limitations

The limitations for this current study were mainly due to the fact that all the nursing staff did not answer all the questions on the questionnaires. Their failure to answer all the questions had a direct effect on the feedback analysed. An additional limitation was the effect of the COVID-19 pandemic, as some staff were off sick, which impacted the number of responses. Due to the COVID-19 pandemic, the researcher, who conducted the study, was only allowed to conduct research on weekends, which implied that input from the weekly staff were not included.

6.4. Recommendations:

6.4.1. Clinical practice



Additionally, 42% (N=36) of the respondents indicated a lack of confidence to perform stimulation activities; however, with adequate training, the confidence of the staff will eventually increase. A boost in confidence, will ensure a boost in mood, and consequently, greater overall well-being of staff. The desire to learn was reported by 61% (N=52) of the respondents, which is a clear indication that the staff members were eager

to learn more about stimulation activities. The nursing staff should be encouraged expand their studies, as well as learn skills in the management of intellectual disability care.

Finally, the findings revealed that 40% (N=34) of the respondents disclosed the lack of time to perform stimulation activities; therefore, a recommendation would be that stimulation activities be conducted on rotation of staff, to ensure all other requirements such as basic nursing care and medication rounds are not neglected.

6.4.2. Research

Qualitative research studies should be conducted on nurses' attitudes towards, as well as the use of stimulation activities. These qualitative studies will ensure a richer perspective, as well as descriptions. This current study should be replicated in other institutions/ hospitals, to obtain a greater and broader overview of the topic. By conducting this study in other hospitals/institutions, a profile of nurses' attitudes towards stimulation activities could be established.

6.5. Conclusion



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ANNEXURES

Annexure A - Ethics clearance letter

WESTERN CA	The YEARS PE Graphic Stress
27 March 2020	
Ms F Agherdien School of Public Nursing Faculty of Community and He	alth Sciences
Ethics Reference Number:	BM20/2/3
Project Title:	Nurses attitudes towards and use of stimulation activities for people with intellectual disability in a psychiatric hospital in the Western Cape.
Approval Period:	13 March 2020 + 13 March 2023
I hereby certify that the Biom of the Western Cape approved research project.	edical Science Research Ethics Committee of the University the scientific methodology and ethics of the above mentioned
Any amendments, extension or o Committee for approval. Please remember to submit a p project.	ther modifications to the protocol must be submitted to the Ethics UNIVERSITY of the rogress report annually by 30 November for the duration of the
Permission to conduct the study	nust be submitted to BMREC for record-keeping.
The Committee must be informe	d of any serious adverse event and/or termination of the study.
Ms Patricia Josias Research Ethics Committee Offic University of the Western Care	er
, ., .,	
	Director: Research Development University of the Western Cape Private Bag X 17 Bellville 7535 Republic of South Africa Tel: +27 21 959 4111
NHREC Registration Number: BMREC-130	Email: research-ethics@uwc.ac.za
	FROM HOPE TO ACTION THROUGH KNOWLEDGE.

Annexure B – Permission letter from Western Cape Department of Health



Annexure C – Catchment area map (Local)



Annexure D – Information sheet



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:** 2917685@myuwc.ac.za

INFORMATION SHEET

Title of Research Project

Nurses' attitudes towards and use of stimulation activities for people with intellectual disability in a psychiatric hospital in the Western Cape.

What is this study about?

This is a research project being conducted by Faldielah Agherdien at the University of the Western Cape. We are inviting you to participate in this research project because your role in working with intellectually disabled people and the stimulation activities you provide are vital to this study. The purpose of this research project is to describe nurses' attitudes and use of stimulation activities for people with intellectual disability in a psychiatric hospital. It is evident that nurses provide stimulation activities in addition to direct nursing care. This study aims to investigate nurses' attitudes towards and use of stimulation activities for people with intellectual for people with intellectual disability in a psychiatric hospital. It is evident that nurses provide stimulation activities in addition to direct nursing care. This study aims to investigate nurses' attitudes towards and use of stimulation activities for people with intellectual disability in a psychiatric hospital in the Western Cape.

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

UNIVERSITY of the

You will be asked to answer questions on a questionnaire. The questionnaire is posed at nurses working at a psychiatric hospital within the Western Cape, working with people who are intellectual disabled. This study aims to investigate nurses' attitudes towards and use of stimulation activities in addition to direct nursing care. Stimulation activities are defined as activities for intellectually disabled individuals aimed at developing their, motor, cognitive and self-care abilities. The questionnaire has 2 parts to it. Section A whereby the participant needs to fill in demographic information such as age and gender. Section B is the survey questionnaire relating to experience and expectations of stimulation activities. The questionnaire will take between 10-15mins.

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, all test subjects names will be kept anonymous. If applicable (1) your name will not be included on the surveys and other collected data; (2) a code will be placed on the survey and other collected data; (3) through the use of an identification key, the researcher will be able to link your survey to your identity; and (4) only the researcher will have access to the identification key.

To ensure your confidentiality, the information obtained from this study will be kept in locked and secure filing cabinets where only the researcher can access it. Data online will be kept under a secure back up system with an encrypted password which is only accessible by the researcher.

If we write a report or article about this research project, your identity will be protected.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities' information that comes to our attention concerning child abuse or neglect or potential harm to you or others. In this event, we will inform you that we have to break confidentiality to fulfil our legal responsibility to report to the designated authorities.

What are the risks of this research?

There may be some risks from participating in this research study. There may be minimal risks during the study. If the participants are traumatized on the basis of psychological, social or emotional they will be referred for pre-arranged counselling at Independent Counselling and Advisory Service (ICAS). The counselling would ensure that the participant feelings which may be expressed in this study are dealt with promptly to assist with any discomfort during participation in this study. The name of the hospital will not be identified on the study to avoid causing harm on the reputation or image of the hospital.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about nurse's management of intellectual disability in a psychiatric hospital setting. We hope that, in the future, other people might benefit from this study through improved understanding of intellectual disability. This study aims to contribute to the existing body of knowledge of intellectual disability care.

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. This study is for the sole benefit of describing nurses' attitudes towards use of stimulation activities for intellectually disabled persons.

What if I have questions?

This research is being conducted by Faldielah Agherdien at the University of the Western Cape. If you have any questions about the research study itself, please contact Faldielah Agherdien *at*: 0726472568 / 58 Orion Road Surrey estate Athlone 7764.

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. J. Chipps

Head of Department: 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 <u>chs-deansoffice@uwc.ac.za</u>

BMREC/HSSREC

Research Office New Arts Building C-Block, Top Floor, Room 28 University of the Western Cape Private Bag x17 Bellville, 7535

This research has been approved by the University of the Western Cape's Animal Research Ethics Committee/Biomedical Research Ethics Committee/Humanities and Social Sciences Research Ethics Committee) –

(REFERENCE NUMBER)



QUESTIONNAIRE

SECTION A: Demographic data

Please complete this questionnaire by marking an $\underline{\mathbf{X}}$ or writing the appropriate answer where in number where applicable.

1.	Gender:	Male	Female			
2.	Age (year	rs in numb	ers)			
3.	Nursing (Category: S	Specialized profe	essional nurse	Professional nurse	
	Enrolled	nurse	Enrolled nu	rse assistant		
4.	Years of ex	xperience v	working with int	ellectually disabled	people:	
SECTIO	ON B Attitu	udes towa	rds and use of s	timulation activitie	es	
Please no rigl	circle only	y the numl g answers.	ber in the corres	ponding column of	your answer choice. '	There are

Item UNIV	Strongly	Disagree	Neutral	Agree	Strongly
WEST	Disagree	CAPE			agree
1. Stimulation activities can improve mood	1	2	3	4	5
2. Stimulation activities can lift spirits and boost energy and vitality	1	2	3	4	5
3. Stimulation activities can enhance growth and recovery from injury and illness	1	2	3	4	5
4. Stimulation activities can help relieve pain	1	2	3	4	5
5. Stimulation activities are all fake	1	2	3	4	5
6. Stimulation activities only work on higher functioning ID persons	1	2	3	4	5
7.Stimulation activities is generally worthless when the person is very sick	1	2	3	4	5
8 Stimulation activities promote motor function	1	2	3	4	5
9. Stimulation activities enhance memory	1	2	3	4	5

10.Stimulation activities promotes listening and instruction	1	2	3	4	5
11.Stimulation activities alleviates boredom	1	2	3	4	5
12. Stimulation activities are done daily	1	2	3	4	5
13. Stimulation activities differ each day	1	2	3	4	5
14.Stimulation activities outcome and changes are recorded	1	2	3	4	5
15 Lack of knowledge and skills	1	2	3	4	5
16 Lack of training	1	2	3	4	5
17. Lack of time to provide stimulation activities	1	2	3	4	5
18. Lack of relevant resources in the facility	1	2	3	4	5
19. Lack of confidence to practice	1	2	3	4	5
20. Do not wish to learn	1	2	3	4	5

Thank you for completing the questionnaire.



Annexure F – Consent form



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: 2917685@myuwc.ac.za

CONSENT FORM

Title of Research Project:

Nurses' attitudes towards stimulation activities for persons with intellectual disability at a psychiatric hospital within the Western Cape.

The study has been described to me in 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 I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

UNIVERSITY of the WESTERN CAPE

Respondent's name:

Respondent's signature:....

Date:

Annexure G– Codebook

Code book

Variable	SPSS variable	Coding instruction
	name	
Number of each questionnaire assigned to	ID	Number assigned to each
identify it.		questionnaire
Age in years	Age	Age in years
Ethnicity	Race	1= African
		2= Coloured
		3= White
		4= Indian
		5= Other
Sex	Gender	1= Male
		2= Female
Nursing category	Category	1= Specialized PN
WESTERN	CAPE	2= Professional nurse
		3= Enrolled nurse
		4= Enrolled nurse assistant
Years of experience	Experience	1 = 0 - 5 years
		2 = 5 - 10 years
		3 = 10 - 15 years
		4 = 15 years - 20 years
		5 = 20 years +
Questions		1

Annexure H– Editorial certificate

22 November 2022

To whom it may concern

Dear Sir/Madam

RE: Editorial certificate

This letter serves to prove that the thesis listed below was language edited for proper English, grammar, punctuation, spelling, as well as overall layout and style by myself, publisher/proprietor of Aquarian Publications, a native English speaking editor.

Thesis title

NURSES ATTITUDES TOWARDS STIMULATION ACTIVITIES FOR PERSONS WITH INTELLECTUAL DISABILITY AT A PSYCHIATRIC HOSPITAL WITHIN THE WESTERN CAPE Author Faldielah Agherdien

The research content, or the author's intentions, were not altered in any way during the editing process, and the author has the authority to accept, or reject my suggestions and changes.

Should you have any questions or concerns about this edited document, I can be contacted at the listed telephone and fax numbers ore-mail addresses.

Yours truly

EHLondt Publisher/Proprietor



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