Outcomes of Forensic Psychiatric Observation Among Alleged Sexual Offenders Referred to Thabamoopo Hospital, Limpopo

by

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DECLARATION

I declare that the mini-dissertation: Outcomes of Forensic Psychiatric Observation Among Alleged Sexual Offenders Referred to Thabamoopo Hospital, Limpopo hereby submitted to the University of Limpopo, for the degree of Master of Medicine in Psychiatry has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

Ngwenya TA	**28 April 2022**
Surname, Initials(Dr)	**Date**

DEDICATION

This dissertation is dedicated to my beloved husband, Solly Matsimbi, for his encouragement and unwavering support throughout this journey, his love has been my inspiration.

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I want to thank the following persons for their respective contributions to this dissertation:

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ABSTRACT

BACKGROUND: The challenge of sexual offence crimes against women and children is notably increasing worldwide with an accompanying impact on the mental and physical well-being of the victims and society, in general. Despite the impact, sexual offenders remain a complex group, not well studied in forensic psychiatry settings globally. Previous studies identify psychosocial factors and mental illness associated with sexual offending. Adequate care, treatment and rehabilitation of sexual offenders are crucial to reduce the impact of sexual offence and re-offending.

AIMS: To determine the demographic variations, clinical factors, and observation outcomes in terms of diagnosis, fitness to stand trial, and criminal responsibility among the alleged sexual offenders referred to Thabamoopo Hospital.

OBJECTIVES: To determine the prevalence of mental disorders among alleged sexual offenders, to determine the number of offenders fit or unfit to stand trial and who are criminal or not criminally responsible, to determine factors associated with vulnerability to sexual offending behaviour.

METHOD: This study is based on a review of clinical records and files and psychiatrists' observation reports of all alleged sexual offenders referred by the courts for forensic psychiatric observation between the period January 2015 to December 2018 at Thabamoopo Hospital.

RESULTS: The sample consists of 94 participants, only one female; all were black Africans. The majority were in middle adulthood, unemployed, of a lower level of education and not married. All participants had been charged with rape. A large number of the alleged sexual offenders were diagnosed with mental conditions. The most common diagnoses were Intellectual disability disorders, psychotic disorders and substance-related disorders. More than half of the sample was fit to stand trial and criminally responsible.

CONCLUSION: More than half of the participants charged with rape were found fit to stand trial and to be criminally responsible. A significant number were diagnosed with mental illness. The outcomes of being unfit to stand trial and not being criminally responsible were common among mentally ill sexual offenders. The results signify that this group of offenders needs adequate psychiatric care, treatment and rehabilitation in order to reduce sexual offending and re-offending due to the impact of mental illness.

ABBREVIATIONS

ADHD	Attention Deficit and Hyperactivity Disorder
CR	Criminal Responsibility
CPA	Criminal Procedure Act
DSM 5	Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
FTST	Fitness to Stand Trial
IDD	Intellectual Disability Disorders
MISO	Mentally Ill Sexual Offender
SUD	Substance Use Disorder
TREC	Turfloop Research and Ethics Committee

DEFINITION OF KEY CONCEPTS

Alleged sexual offender

An alleged sexual offender is a person with allegations of sexual offending. This includes rape, compelled rape, sexual assault, compelled sexual assault, sexual grooming, incest and child pornography or prostitution (South Africa, 2007).

Rape is defined as unlawfully and intentionally committing an act of sexual offence with the complainant without the complainant's consent. This includes the oral, anal or vaginal penetration of a person (male or female, regardless of age) with a genital organ, anal or vaginal penetration with any object and the penetration of a person's mouth with the genital organs of an animal (South Africa, 2007).

Sexual assault is unlawfully and intentionally sexually violating the complainant without consent from the complainant.

Compelled rape is defined as unlawfully and intentionally compelling unconsented third person to commit an act of sexual offence with the complainant without the complainant's consent.

Compelled sexual assault is when a person unlawfully and intentionally forces an unconsented third person to sexually violate the complainant without the complainant's consent.

In this study, an alleged sexual offender refers to a person with allegations of any type of sexual offence, referred by the courts upon suspicion of mental illness for forensic psychiatric observation at Thabamoopo Hospital.

Criminal responsibility

Criminal responsibility is the ability of the accused to appreciate the wrongfulness of his or her actions at the time of committing an offence in question: section 78(a), and whether he or she can act in accordance with an appreciation of the wrongfulness of his or her action: section 78(b) (South Africa, 1977).

In this study, criminal responsibility refers to the outcome of a forensic psychiatric observation of alleged sexual offenders, referred by the courts for assessment of criminal responsibility. It is a retrospective mental state assessment to determine whether the accused appreciated the wrongful act and acted in accordance with the appreciation at the time of committing the alleged sexual offence crime.

Fitness to stand trial

Fitness to stand trial is defined as the ability of the accused to understand and follow court proceedings, as well as to participate appropriately and meaningfully during court proceedings. This assessment includes evaluating whether the offender has the required capacity to consult with and instruct a lawyer with proper rational understanding for proper self-defence (Chadda, 2013).

In this study, clinical records of alleged sexual offenders referred by the court under section 77 of the CPA (Criminal Procedure Act) upon suspicion of mental illness are reviewed to determine whether they were able to follow court proceedings meaningfully and whether the alleged offender would be able to instruct a lawyer for proper self-defence.

Forensic psychiatry

Forensic psychiatry is defined as the collaboration between mental health services and criminal justice sector, with a focus on assessment, management and treatment of criminal offenders and prisoners with mental disorders which require psychiatric evaluation to exclude the effect of mental illness on criminal offences (Sukeri, Betancourt, Emsley, Nagdee and Erlacher, 2016).

This study is based on the interaction between mental health services in the Thabamoopo Hospital and the criminal justice sector. This includes the referral of alleged sexual offenders by the courts for forensic psychiatric observation to be evaluated for fitness to stand trial, criminal responsibility and the impact of mental illness on the offending behaviour.

Forensic Psychiatry Observation

Forensic psychiatric observation entails the procedure undertaken when the court believes that, due to mental illness, the accused is incapable of understanding the

court proceedings and wrongfulness of his or her actions. Subsequently, the court is obliged to refer the offender for mental observation for a period not exceeding 30 days, by the appointed psychiatrist/s at the designated mental health setting.

Following the observation period, psychiatrist(s) provide the referring court with a written forensic observation report (South Africa, 1977).

In this study, clinical records of the alleged sexual offenders referred by courts during the study period, for forensic psychiatric observation at Thabamoopo Hospital by a panel of two psychiatrists, either for day visits or for admission for less than 30 days, are reviewed.

Mental Disorder

Mental disorder is a syndrome characterised by a clinically significant disturbance in an individual's cognition, emotional regulation or behaviour. These reflect a dysfunction in the psychological, biological or developmental process underlying mental functioning and are usually associated with significant distress or disability in social, occupational, or other essential activities (Kupfer, Regier and Narrow, 2013).

Outcomes

Outcomes in the clinical assessment are based on the information given by the investigator, in the form of a report on behalf of the patient (Velentgas, Dreyer and Albert, 2013).

In this study, outcomes refer to the forensic psychiatric observations detailed in a report written by the psychiatrists who observed the alleged sexual offenders referred by court order during the study period.

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CHAPTER 1: INTRODUCTION, BACKGROUND AND ORIENTATION TO THE STUDY

1.1 Introduction

The challenge of sexual offence crimes against women and children is notably increasing worldwide, resulting in short- and long-term mental, physical and socio-economic consequences (World Health Organization, 2013). Moreover, these negative effects subsequently lead to prolonged unpleasant emotions and poor quality of life - extending beyond the victims to their families, the public health sector and society in general (Chiremba, 2015; Sokudela, 2017).

According to analytical findings of the World Health Organization (WHO), the prevalence of sexual offences between women aged 15 and 49 years is estimated to be between 10% to 50 % in Japan and Ethiopia. Generally, 35% of women have been physically or sexually violated by either intimate or non- intimate perpetrators (WHO, 2013). A study conducted in Nairobi among 356 participants reveals that 43% of learners are sexually harassed at school and 27% of individuals in their work environment (Kou, Auka and Kilaha, 2018). A similar report from Uganda indicates 40% and 50% sexual offence cases among males and females in higher learning institution, respectively (Pavithra, 2018).

South African crime statistics between 2016/2017 and 2017/2018 indicate a rise in sexual offence crimes from 49660 to 50108. These figures include reported and police-discovered cases (South African Police Service, 2017). Of the provinces, Limpopo had the highest sexual offence crimes of between 3828 and 3862 cases.

Sexual offending creates a burden upon the legal and healthcare sectors, as adequate rehabilitation of sexual offenders is dependent on their interactions (Chiremba, 2015). Usually, society expects legal punishment to deal with sexual offenders (Sokudela, 2017). In contrast, the mandate served by criminal justice and mental health requires adequate management of sexual offenders for the prevention of sexual victimisation, protection of society, and to minimise the financial impact of sexual offence crimes (Olver and Wong, 2013).

The legislative guidelines regulating forensic assessment and conviction of the accused with mental illness vary worldwide as a result of broad socio-cultural orientations (Alhmoud, Zahid, Ibrahim, Syed and Nuguy, 2018: Pillay, 2016). However,

the common goal is to assess the impact of mental illness on a particular offence (Weinberger, Sreenivasan, Azizian, and Garrick, 2018).

Within the South African context, the court may refer individuals having committed an alleged sexual offence upon suspecting mental illness to a panel of forensic psychiatrists for 30 days or less, in a designated forensic psychiatric unit for forensic psychiatric observation concerning their fitness to stand trial and/or their criminal responsibility (Morgan and Del Fabbro, 2018; Kaliski, 2006).

Evidence supports that psychosocial and psychiatric factors may predispose some individuals to sexual offending (Sokudela, 2017). These factors may include demographic variables, a background of childhood abuse, substance abuse or mental disorders (Kingston, Olver, Harris, Wong and Bredford, 2015; Sigler, 2017; Adayonfo and Akanni, 2019; Prinsloo, 2013).

In addition, theories of possible aetiological factors of sexual offences such as psychodynamic theory, social learning theory and socio-cognitive theory identify multifactorial causes, (Romi, 2009). The Psychodynamic Theory states that sexual offenders possess a high level of libido but a low sense of morality and that this imbalance leads to sexual gratification through sexual assaulting (Adayonfo and Barr, 2018). Social Learning Theory explains that sexual offenders may be victims of sexual violence or they may have been raised in an environment where sexual violence was witnessed. According to Socio-cognitive Theory, low self-esteem may result in fear of age-appropriate sexual relationships (Adayonfo et al., 2018).

Sexual offence cases are increasing significantly in society and threaten individuals' sense of safety and security. Moreover, the offences have long-term psychosocial and physical impacts on the victims (Adayonfo *et al.*, 2018). Despite the negative psychological impact of sexual offence crimes, there is a notable gap of knowledge of psychiatric and psychosocial factors influencing offending sexual behaviour (Woodworth, Freimuth, Hutton, Corpenter, Ager and Logan, 2013).

The current study explores relevant psychiatric and psychosocial factors associated with sexual offending, in order to better understand this population of offenders. This will enable mental health care providers to recommend adequate psychiatric interventions crucial to the care, treatment and rehabilitation of mentally ill sexual offenders.

1.2 Background of the study

Mental disorders are common among sexual offenders and may directly or indirectly contribute to their committing sexual offences (Prinsloo and Hesselink, 2015; Prinsloo, 2013). Hence, both forensic psychiatry and the legal justice system play a crucial role in the successful rehabilitation of sexual offenders to minimise the risk of sexual re-offending (Oliver & Wong, 2013). However, such success is dependent on the further development of a body of knowledge concerning this subject (Vollm, Clarke, Herrando and Seppanen, 2018; Emond, Nolet, Rouleau and Gagnon, 2016; Sokudela, 2017).

South Africa and other African countries, in general, have a scarcity of literature in the subject of forensic psychiatric assessment, particularly with regard to sexual offenders (Sokudela, 2017; Adayonfo *et al*., 2019).

Research has demonstrated an association between psychiatric disorders and sexual offending. Furthermore, mental disorders and substance abuse may both result in poor judgment, negative mood and poor insight leading to offending sexual behaviour (Adayonfo *et al*., 2019).

An Australian study of a sample of 1511 incarcerated sexual offenders demonstrates that 1250 (92,2 %) were diagnosed with mental disorders, like Alcohol misuse (40%), Paraphilia (43,3%) and Personality disorders (53,6%), 47.8% of which fall into cluster B (Eher, Rettenberger and Turner, 2019).

A study conducted in Nigeria among 136 prisoner participants comparing sexual offenders N=68 with non-sexual offenders N=68, found that of the sexual offenders' group total of 34, 35% had general psychiatric comorbidities, compared with only 4 (6%) of non-sexual offenders' group (Adayonfo *et al*., 2019). Similarly, A South African study conducted at Weskoppies hospital on a sample of 62 alleged sexual offenders found that 70.9 % had mental illness diagnoses, including psychotic disorders (88%) and intellectual disability disorders (75%) (Sokudela, 2017).

Psychiatry plays a vital role in the multidisciplinary management of sexual offenders. For this reason, knowledge of psychosocial factors contributing to sexual offending is necessary for the adequate management and prevention of sexual offence crimes (Renee, Adam, Broke and Kartlyn, 2018).

1.3 Problem statement

Sexual offenders are a complex group of offenders who have not been thoroughly studied (Woodworth *et al*., 2013). In South Africa, literature on forensic psychiatry is scarce, particularly on sexual offenders. This leaves a gap in understanding psychiatric and psychosocial factors contributing to sexual offending (Sokudela, 2017). This, in turn, compromises mental health and correctional services' optimal rehabilitation of sexual offenders.

Given the lack of literature on this subject, this study evaluates outcomes of forensic psychiatric observation of the alleged sexual offenders referred to Thabamoopo Hospital by the courts, with the focus on fitness to stand trial and criminal responsibility.

Thabamoopo Hospital is one of the two designated forensic psychiatric hospitals where forensic mental observation of alleged offenders, referred by the courts in Limpopo Province, is conducted. Moreover, the outcomes of forensic psychiatric observations among alleged sexual offenders have not been previously studied in Thabamoopo Hospital or in the Limpopo Province.

Understanding some of these factors will aid in the recommendation of strategies necessary for adequate risk assessment, treatment and rehabilitation of sexual offenders to minimise the impact of a sexual offence on victims, the health sector, and legal services.

1.4 Significance of the study

This study aims to guide the Department of Psychiatry of the University of Limpopo in identifying factors associated with sexual offending. This, in turn, will assist the Limpopo Department of Health and Criminal Justice with strategies to reduce the impact of sexual offence crimes on victims and society in general.

1.5 Research Questions

- What was the prevalence of mental disorders among alleged sexual offenders referred for forensic psychiatric observation at Thabamoopo Hospital between January 2015 and December 2018?
- What was the outcome of fitness to stand trial observations among sexual offenders referred for forensic psychiatric observation at Thabamoopo Hospital between January 2015 and December 2018?

- What was the outcome of the observations of criminal responsibility among sexual offenders referred for forensic psychiatric observation at Thabamoopo Hospital between January 2015 and December 2018?
- What were the factors associated with sexual offending behaviours among alleged sexual offenders during forensic psychiatric observation at Thabamoopo Hospital between January 2015 and December 2018?

1.6 Aim of the study

- To determine the outcome of forensic psychiatric observation, and the prevalence of mental illness and other associated factors among the alleged sexual offenders referred to Thabamoopo Hospital by the courts during the study period.

1.7 Research Objectives

- To determine the prevalence of mental disorders among alleged sexual offenders during forensic psychiatric observations between January 2015 and December 2018 at Thabamoopo Hospital.
- To determine the proportion of sexual offenders in terms of fitness to stand trial during forensic psychiatric observation between January 2015 and December 2018 at Thabamoopo Hospital.
- To determine the proportion of sexual offenders in terms of criminal responsibility during forensic psychiatric observation between January 2015 and December 2018 at Thabamoopo Hospital.
- To determine factors associated with offending sexual behaviour among sexual offenders during forensic psychiatry observation between January 2015 and December 2018 at Thabamoopo hospital.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Sexual offence crime has a significant negative impact on victims, families and society at large. Unfortunately, there are almost no specific explanations of the cause of sexual offending (Chirembu, 2015). The long-term impact includes the development of psychiatric disorders such as depression, post-traumatic stress disorders and suicidal attempt. A study conducted in Limpopo, comparing 30 sexually assaulted women with 30 physically assaulted women, reveals that both groups developed depression and PTSD symptoms 3 months later and furthermore, 41% of the sexually assaulted women developed severe depression (Davhana-Maselesele, Madu, Wyatt, Williams, Makhado and Wong, 2014). Despite the high rate of child sexual abuse and its subsequent long-term impact, in Limpopo province many cases are undisclosed or dealt with in family or community settings to protect the families (Rapholo, 2019).

Theories of sexual offence attribute offending sexual behaviour to biological, behavioural and confluence factors. Biological factors include brain neurotransmitter dysregulations which lead to mental illness. The behavioural model is explained by learning theory and conditioning as a result of childhood adversities. It includes conditioned sexual deviances such as masturbation habits. Confluence theory describes early life adversities interacting with current critical situations to predispose sexual offending (Romi, 2009). In relation to sexual offence theories, an effort to understand the factors influencing sexual offending is vital in forensic mental health and criminal justice for guidance on preventative methods and adequate rehabilitation (Hesselink and Booysens, 2017; Sokudela, 2017; Cheremba, 2015; Vollm *et al.,* 2017).

2.2 Outcome of mental illness among sexual offenders

Mentally ill sexual offenders may be involved in sexual offending behaviour as a function of poor impulse control, deviant sexual interests or personality traits (Renee *et al.* 2018).

Psychiatrists play an essential role in assisting the court with the provision of expert opinion and in conducting forensic psychiatric observation of criminal offenders, especially where the accused is suffering from mental illness (Pfueger, Franke, Graf, and Hachtel, 2015; Sarkar, 2013).

Available literature demonstrates that mental illness is closely associated with crimes of a violent nature in general, including sexual offences (Kingston *et al*., 2015; Valenca, Meyer, Freire, Mendlowics and Nardi, 2015). This notion indicates that clinical knowledge and competency among mental health care practitioners is crucial in terms of diagnosing mental disorders for the proper assessment of high-risk sex offenders and goal-directed treatment plans. This would assist in reducing sexual offence crimes, benefit mentally ill sexual offenders in terms of adequate clinical management and would protect society in general (Booth and Gulati, 2014). A study conducted in Canada revealed a high rate of mental disorders among sexual offenders referred by courts (Booth and Gulati, 2014). The most common disorders emerging from the research were personality disorders 47%, depressive disorders 43%, alcohol dependence 42%, substance dependence 38%, intellectual disability disorder 31%, anxiety disorders 28%, attention deficit hyperactivity disorder 20%, psychotic disorders 16%, bipolar and related disorders 13% and dementia 10%. This high prevalence of mental disorders emphasises the significance of adequate rehabilitation as a target to reduce offending sexual behaviour among the mentally ill population (Booth & Gulati, 2014).

In a study, similar to the one conducted in Canada with a focus on the relationship between mental disorders and sexual re-offending, a 95% prevalence of mental illness among the sexual offenders was found by Kingston *et al.* (Kingston *et al.,* 2015).

The notion of mental illness among sexual offenders is further supported by a study conducted in Rio de Janeiro, Brazil, among 44 male sex offenders (Valenca *et al.,* 2015;Ramouthar, 2015). According to this study, a total of 56.8% of sexual offenders were diagnosed with mental disorders, while intellectual disability disorder cases were 20.4% and other mental disorders, including neurological disorders, were found to be 36.4% (Valenca *et al.,* 2015; Ramouthar, 2015). According to these studies' conclusions, intellectual disability disorder is closely associated with offending sexual behaviour and stands above other mental disorders among sexual offenders.

A New York Study conducted on 3194 samples of male sexual offenders indicated a 2.78% diagnosis of personality disorders (Sigler, 2017). Noteworthy is the fact that borderline and antisocial personality disorders were diagnosed most frequently on the personality disorder spectrum. Furthermore, borderline personality disorder was most

associated with sexual offence towards adults and molestation of children, while antisocial personality disorder was mostly linked to the sexual assault of adults (Sigler, 2017).

A cross-sectional study carried out on 1511 Australian prisoners among revealed that among the total participants, 1250 (92,9%) participants were diagnosed with a variety of mental disorders. (Eher, Rettenberger and Turner, 2019). The most prevalent mental disorders were personality disorders (53,6%) consisting mostly of cluster B personality disorders (47,8%), followed by paraphilic disorders (43,3%) and alcohol misuse (40,3%) (Eher, Rettenberger & Turner, 2019).

A systematic review in Hongkong of 24 papers based on juvenile sex offenders' executive functioning found that cognitive deficit and inhibition of interference or response inhibition are most frequently reported in adult male sex offenders for both pedophiles, child molesters and unclassified sex offenders (Adjorlolo and Egbenya, 2016. Moreover, impairment in higher cognitive flexibility and lower executive abilities (inhibition) may influence tendencies leading to committing sexual offences among both juvenile and adult males (Adjorlolo & Egbenya, 2016).

Other conditions such as Kluver Bucy syndrome, traumatic brain injury and drugs with dopamine agonist drugs used in the treatment of Parkinson's disease may induce sexual hyperactivity and lead to offending sexual behaviours (Chan and Lam, 2018). Proper risk assessment and adequate management of sexual offenders demand clinical competence of mental health care workers in diagnosis when dealing with sexual offenders (Booth & Gulati, 2014).

A study conducted in Nigeria among 136 inmates of both sexual offenders and non-sexual offenders revealed an association between mental illness and sexual offending (Ehigiator and Obarisiagbon, 2018). However, other factors like age, marital status, level of education, socio-economic class and previous criminal history were also associated with mental illness. The results showed that among the 136 prisoners, 68 had been charged with a sexual offence. Among all sexual offenders, 24(35%) had general psychiatric comorbidity compared with 4 (6%) nonsexual offenders who had a psychiatric comorbidity. In addition, offenders with charges of sexual assault without a diagnosis of mental comorbidity were 44 (65%) compared to non-sexual offenders

without a diagnosis of psychiatric comorbidity 64 (94%) (Ehigiator & Obarisiagbon, 2018).

A South African study of 128 child sexual offenders' conducted over three years in Sterkfontein Psychiatric Hospital in Gauteng found that the two most prevalent diagnoses were substance-related and intellectual disability disorder each with 35(27,34%) (Govender, 2014). In the group of 20 offenders who were minors, under 18, 10 (50%) were diagnosed with intellectual impairment, followed by 6 (30%) with a diagnosis of conduct disorders or traits, 1(5%) substance-related disorders, especially alcohol and cannabis, malingering and general medical condition each and 6 (30%) without any psychiatric condition. Other general diagnoses included psychotic conditions without substances comorbidity 30 (25%), mood disorders 3 (2,34%), dementias 6 (4,69%), conduct disorders or traits 6 (4, 69%), personality disorders 4 (3,13%), malingering 10(7,81%), and relevant other medical conditions 10 (7,81%) compared with 24 (18,75 %) with no psychiatric condition diagnosis (Govender, 2014).

In contrast, a study conducted in the United Kingdom among 121 participants in two groups, one with a diagnosis of mental conditions and the other group without any diagnosis of mental conditions, found that there is no direct relationship between mental health and crime (Halle, Tzani-Pepelasi, Pylarinou and Fumagalli, 2020). Among both groups, only 57 (47,17%) participants were diagnosed with mental conditions like schizophrenia 6 (28,95), affective disorders 35 (28,9), behavioural syndrome 2 (1,7%), personality disorders 7(5,8%), childhood or adolescent-onset behavioural disorders 1(0,8%) and a disorder of psychological development 2 (1,7%). From the total sample, 35 (61.4%) of the participants with mental conditions and 30 (46,9%) of participants without mental conditions were convicted of at least one rape charge. From to this finding, the conclusion was that some mental disorders are not closely linked to involvement in violent crimes and that there is no association between specific mental condition diagnoses and particular criminal charges (Halle *et al.,* 2020).

2.3. Prevalence of fitness to stand trial and criminal responsibility among sexual offenders

Fitness to stand trial focuses on the ability of the offender to understand the court proceedings meaningfully, for a proper self-defense. Criminal responsibility focuses on the retrospective assessment of appreciating the wrongfulness of the action when

committing an offence and the ability to act in accordance with the appreciation of the wrongfulness of the action (South Africa, 1977). According to the South African legislature, the court may refer sexual offenders, upon suspecting mental illness, for assessment of fitness to stand trial and criminal responsibility (South Africa, 1977).

Mental illness may or may not affect fitness to stand trial (FTST) and criminal responsibility (CR) or one entity may be affected and the other not. Notably, there are few studies of FTST and CR, particularly concerning sexual offenders' outcomes of forensic psychiatric observations.

A South African study conducted at Weskoppies hospital of 62 alleged sexual offenders found that 70.9 % had a mental illness diagnosis, including psychotic disorders 88% or an intellectual disability disorder 75% (Sokudela, 2017). Among the mentally ill sexual offenders (MISO), 51 % were unfit to stand trial due to the impact of mental illness. However, almost 64% of offenders with a diagnosis of schizophrenia were found fit to stand trial.

The assessment of criminal responsibility revealed that most sexual offenders were found to be criminally responsible, 64% of the cases, while a minority of 34% were found not to be criminally responsible (Sokudela, 2017). This study emphasised that, even though mental disorders may be diagnosed among sexual offenders, the outcome of forensic psychiatric observations does not always mean that subjects are unfit to stand trial or not criminally responsible, irrespective of the underlying mental disorders.

Another South African study focused on the outcome of forensic psychiatric observation among 128 sexual offenders of minors victims showed that the majority of the participants 72 (56,25%) were fit to stand trial; 48 (37,5%) were found unfit. In terms of criminal responsibility, a significant number of 75 (58, 59%) was found to be criminally responsible, while a minority of 20 (15,63%) were not criminally responsible as they could not appreciate the wrongfulness of their action or act in accordance with such appreciation when committing the sexual offence, whereas, only 8 (14,06%) were found not criminally responsible, based on their inability to act in accordance with the appreciation of the wrongfulness of the act. In addition, 4 (3,13%) had a diminished capacity for appreciating the wrongfulness of their action, and 11(8, 59%) did not sufficient information on criminal responsibility outcomes (Govender, 2014).

2.4. Factors associated with sexual offending behaviour

Sexual offending behaviour has been associated with other factors such as socio-demographic variations, childhood victimisation, substance abuse, sexual disorders, and other psychosocial factors. Hence, forensic psychiatry plays a major role in terms of the skills necessary for the management of psychosocial factors predisposing to criminal offending (Sarkar, 2013).

2.4.1 Socio-demographic factors

Sexual offenders are largely associated with the male gender, being single, low educational level, low-class jobs, and middle age (Hesselink & Booysens, 2017).

A study in New York commented on gender, where the total sample of 3194 participants were males, and their primary psychiatric diagnoses were mostly personality disorders, especially antisocial and borderline personality disorders (Sigler,2017). Another study, conducted in Namibia, of 3878 inmates showed that about 11.3% of offenders had committed a sexual offence. All sexual offenders were males, the majority were young adults younger than 41, only 8% were juveniles, 5.1% were between 41 and 60 and 1.6% were older than 61. For the majority, 87%, of their highest level of education was grade 10 and less than half were formally employed (Chiremba, 2015).

Noteworthy is that studies of female sexual offenders are generally limited. One study of female sex offenders was conducted in South Africa; participants were between 12 and 18, all were females, and the majority had sexually assaulted small girls (Da Costa, Spies & Coetzee, 2014). This study indicated that females might also be involved in offending sexual behaviour. However, the proportion is much lower than male sex offenders. Similarly, a South African study of 128 sexual offenders reviewed records over a three-year period found only one female sex offender (Govender, 2014).

Another local study which comprised of 62 sexual offenders had one female participant; she became involved in sexual offence because she assisted a male sex offender (Sokudela, 2017). This suggests that females might be involved in facilitating the sexual offence without any primary intention to engage in physical sexual assault.

2.4.2 Substance abuse

The predominance of alcohol abuse among sexual offenders is linked to biological dysregulation of cognitive function and deficit information processing. This results in impaired cognitive ability to evaluate social behaviour cues and poor judgment during alcohol intoxication (Abracen, Looman, and Ferguson, 2017). In addition, alcohol abuse is associated with a high risk of sexual re-offending, especially when there is a comorbid primary psychiatric diagnosis (Kingston *et al*., 2015).

A study conducted in Washington, looking at the role of marijuana in sexual assault, concluded that alcohol is the most commonly used substance among sexual offenders. It has been well-studied along with other substances. However, looking at individual substances, cannabis was the most used illicit substance of abuse. In addition, when cannabis and alcohol use is combined, it results in worsening the impairment and poor risk evaluation with resultant high potential for sexual victimisation (Floyd, 2017).

The study conducted among incarcerated sex offenders in Namibia showed that almost 42.3% of the offenders were intoxicated when committing a sexual offence (Chiremba, 2015). Another study in Nigeria compared incarcerated sex offenders with non-sex offenders. The findings of this study demonstrated a high rate of alcohol and cannabis abuse, 82.9%; 28.6% alcohol abuse and 37%; 5.7% cannabis abuse among the two groups, respectively (Adoyonfo and Akanni, 2019). These studies suggest that alcohol is by far the most commonly used substance of abuse associated with sexual offending.

2.4.3 Childhood abuse victims

The literature supports a link between childhood victimisation and becoming an abuser later in life, as a result of failure to cope with the pain of victimisation (Da Costa et al., 2014; Hesselink & Booysens, 2017). According to behavioural theory, sexual abusing behaviour stems from learning and conditioning theory whereby different rewards, punishment, antecedents and consequences result in learning improper sexual habits. In some instances, this theory combines with learning by association, where observing gender-based violence might result in a child replicating such behaviour later in life (Romi, 2009).

A local study, conducted among 11 cases of youth sex offenders, demonstrated that all youth offenders reported multiple childhood adversities such as poor attachment with primary caregivers, childhood sexual abuse by immediate or extended family members, as well as exposure to violence. The study suggested that the abused became abusers later in life, as a coping mechanism to release self-victims' experiences (Hesselink and Jordaan, 2018). However, contrary to this finding, a Nigerian study among 29 inmates with charges of sexual offence found that only a minority, 13.79%, reported a history of having been sexually abused during childhood (Aborisade and Shontan, 2017).

These contradictory findings mean that child abuse may or may not result in the notion of the abused/abuser and that other factors may contribute to sexual abuse behaviour later in life.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the methodological layout of the study. It entails descriptions of the following: study design, study setting, study population, inclusion and exclusion criteria, sampling method and size, data collection and analysis, validity, reliability, bias and ethical considerations.

3.2 Study design

The study uses a quantitative retrospective, record review design. Quantitative research is defined as a means of testing objective theories by examining the relationship among variables measured, typically on instruments, to analyse numbered data using statistical procedures to generalise or replicate the findings (Creswell, 2009). The clinical files of 94 sexual offenders referred by the court for forensic psychiatric observation during the study period are analysed. All clinical records of sexual offenders observed during the study period have been obtained from the hospital registry for the relevant information required for the study as per the data collection sheet. There has been no contact with participants since all data was extracted from clinical records.

3.3 Study setting

The study was conducted at the Thabamoopo Hospital. Thabamoopo Hospital is a specialised forensic psychiatric hospital, located 51.7km south of the Polokwane City, and is situated in the Lepelle-Nkumpi municipality in the Lebowakgomo area, in the Capricorn District of the Limpopo Province, South Africa (Figure 1).

Thabamoopo Hospital is one of the two forensic psychiatric facilities in the province. The hospital renders general psychiatric services for the Capricorn district and for other surrounding district hospitals without full psychiatric facilities for mental health care users after 72 hours of involuntary admission. In addition, it provides care, treatment and rehabilitation of state patients admitted under the MHCA section 42.

Thabamoopo forensic psychiatric team conducts forensic psychiatric observations of court referrals for all criminal charges, including sexual offence, on suspicion of mental illness. Observations are conducted both as outpatient assessments and as inpatient observations of the accused who are admitted for less than 30 days if necessary.

At the end of the observation the psychiatrist(s) in charge provide the referring court with a report. The management of Thabamoopo Hospital has given permission to conduct the study, focusing on the group of sexual offenders observed during the study period.

See the map showing the study area below:

Figure 3.1: Map of the Limpopo Province showing Thabamoopo Hospital

https://www.google.co.za/maps/place/Thabamoopo+Hospital/@-24.3025521,29.546894,8z/data=!4m5!3m4!1s0x0:0xb4aa3d662bf3d85f!8m2!3d-24.3025521!4d29.546894

3.4 Study Population

The population of this study is comprised of all forensic psychiatric observation cases with alleged criminal charges of a sexual offence referred to Thabamoopo Hospital by the courts during the study period. An estimate of 80 to 120 alleged offenders with different criminal charges, including sexual offences, are observed in a year. This makes an estimated minimum of 320 cases referred by the courts during the study period, according to the hospital's unpublished data. The number of sexual offenders, among other offences, made it possible to include the entire population of sexual

offenders observed between January 2015 and December 2018 in this study, using census sampling.

3.5 Sampling

The sample size was based on census sampling of all alleged sexual offenders who were referred by the court for forensic psychiatric observation during the period January 2015 to December 2018. The census sampling method was applied as the small population size allowed for the entire population of alleged sexual offenders to form part of the sample (Singh and Masuku, 2014).

Sampling is a selection process of part of the population to represent the entire population by giving information about the population characteristics based on findings of that representative sample (Kulshreshtha, 2013).

The sample of this study consisted of all the files of sexual offenders observed by court order during the study period. It was possible to include the entire population of sexual offenders. Files of sexual offenders were selected retrospectively from the clinical records without any interview or interaction with the participants.

The total sample of this study obtained from the hospital registry comprises 94 files.

3.6 Inclusion and exclusion criteria

3.6.1 Inclusion criteria

Clinical records of all alleged sexual offenders of any age and gender referred because of a sexual offence by the courts under the Criminal Procedure Act 51 of 1977 section 77 and 78, for forensic psychiatric observation at Thabamoopo Hospital between January 2015 and December 2018 were included.

3.6.2 Exclusion criteria

- All alleged sexual offenders referred prior to the period January 2015 and after December 2018 were excluded.
- All court referrals with charges other than sexual offences were excluded.

3.7 Data collection

All participating files were accessed from the Hospital registry. Data was extracted from the clinical files.

The file number recorded in the registry was used to trace all participating files with the assistance of the clerk in charge of the registry section. After obtaining the files, the researcher was responsible for keeping all the records safe.

The data collecting tool used to extract required clinical information was developed by the researcher and edited, influenced by the tool used in a local forensic psychiatric observation study by Schutte (2013): see Annexure B.

The data collection tool comprises of four (4) sections, described below.

Section A - Socio-demographic data: age, sex, race, marital status, employment status, level of education, substance history and relevant childhood abuse.

Section B - Forensic data: criminal charges, the section under which the referral was made, reason for the referral and previous history of criminal activity.

Section C - Psychiatric history: past psychiatric history diagnosis and treatment, relevant medical history and psychiatric diagnosis during the assessment.

Section D - Observation outcome: Fitness to stand trial and criminal responsibility status.

3.8 Data Analysis

The sample size of sexual offenders during the study period of three years came to a total of 94 participants. A statistician was consulted to assist with data analysis.

The data analysis studies the organised material to discover inherent facts. The data is analysed from as many angles as possible to determine facts (Pandey and Pandey, 2015).

Descriptive statistics have been used for the first part of data analysis to summarise the data, using the Statistical Package for the Social Sciences (SPSS), version 26. This includes an analysis of continuous data using mean and standard deviations, analysis of categorical data using frequencies and percentages and tabloid presentation. For analytical statistics, the Chi-square test and t-test have been used to compare groups of categorical and continuous data. A P-value of less than 0.05 was considered significant.

3.9 Reliability and Validity

3.9.1. Reliability

Reliability is the extent to which the measuring instrument produces accurate and consistent results whenever used (Swartz, de la Ray, Duncan, Townsend and O'Neill, 2016). The data collecting tool for this study has been previously used in a forensic psychiatric observation study by Schütte (2013). The tool is applicable to this current study, as all parameters required for this study have been extracted from clinical records.

3.9.2. Validity

Validity is the accuracy of the measuring tool to measure what it sets out to measure (Swartz *et al.,* 2016). The data collecting tool had been used in a previous study and was compatible with the objectives and research questions in this study.

In terms of reliability and validity, this study can be reproduced by any researcher because the data collecting tool will be applicable to any study with similar required clinical information.

3.10 Bias

Bias is the absence of neutrality in research whereby statistical results are distorted by any factors that deviate the study results or findings of the truthful reflection of the study concluded. It can occur and affect any stage of the research (Smith and Noble, 2014).

3.10.1. Selection Bias

Selection bias has been avoided by including the whole population of alleged sexual offenders referred by the courts for psychiatric observation for assessment of fitness to stand trial and criminal responsibility during the study period.

3.10.2. Information Bias

Noteworthy is that in retrospective record review, information bias may be introduced in cases of missing clinical information.

Although information bias depends on primary data collection, this was minimised by comparing clinical information captured by all multidisciplinary team members during the observation period.

3.11 ETHICAL CONSIDERATIONS

- Ethical clearance: ethical approval to conduct the study was obtained from the Turf Loop Research and Ethics Committee (TREC).
- Permission: permission to conduct the study was obtained from the Limpopo Department of Health.
- Permission: permission to access clinical records of the participants was attained from the Thabamoopo Hospital Chief Executive Officer.
- Confidentiality: files were traced from records registry using file numbers; files were accessed exclusively by the researcher. The details of the participants from the file records were handled with respect, never discussed with any person and all files were kept in secured lockers only accessed by the principal researcher.
- Anonymity: all details of participants were kept anonymous by assigning numbers to the file number without using participants' identity information.
- Communication method: data was obtained from the clinical files as documented during the observation period, without any interaction with the participants.

CHAPTER 4: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The previous chapter discusses the structural and fundamental methodological components relevant to the present study. The current chapter examines the approaches used in dealing with the data captured for this study. Data was obtained using research questionnaires designed for the purpose of determining the outcome of forensic psychiatric observation among sample of 94 alleged sexual offenders participants, referred to Thabamoopo Hospital by the courts during the study period.

The current chapter begins by discussing the framework used for analysing and interpreting the data before describing the characteristics of the research participants.

This is followed by an analysis of the results obtained about the participants of this study, aimed to determine the outcome of forensic psychiatric observation of the alleged sexual offenders referred to Thabamoopo Hospital by the courts during the study period. Most of the results in the current chapter are presented either as tables, graphs or figures.

4.2 Statistical analysis

The researcher was assisted by a University of Limpopo statistician who is interested in quantitative research. The statistician assisted in various areas of the study. First, the statistician guided the applicable research design as well as the design and construction of the data collection instrument. When the data was ready for analysis, the statistician guided the researcher to choose the most appropriate data analysis methods as well as how to use the SPSS software to analyse the data. Furthermore, the statistician assisted by double-checking to see whether the interpretations made by the researcher were accurate. After the questionnaires were returned, they were screened to eliminate those that were incomplete and those in which the same question was answered throughout. This procedure was immediately followed by the capturing of the data on a Microsoft Excel computer package. The Excel document was then imported into the IBM SPSS Statistics Version 26, where it was coded in preparation for data analysis.

The data analysis involved several rigorous statistical tests: reliability tests, descriptive statistics and inferential statistics**.** A comprehensive diagrammatic representation of

the research path adopted for data analysis in the current study follows in the next section.

4.2.1 Descriptive Statistics

Descriptive statistics are techniques that help to state the characteristics or appearance of sample data (Zikmund, Babin , Carr, and Griffin n, 2013). Frequency tables and the mean score ranking technique are the major descriptive statistics employed in this study.

4.2.2 Frequency distributions

Frequency distributions such as percentages, graphs, line charts, pie charts, histograms and bar charts were utilized to display research findings. Frequency distributions are used to depict absolute and relative magnitudes, differences, proportions, and trends (Zikmund, Babin, Carr, & Griffin, 2013). These methods use both horizontal and vertical bars to examine different elements of a given variable (Malhotra, 2011). The use of frequency distributions facilitated the presentation of the observations of the 94 respondents.

4.3 Demographical information

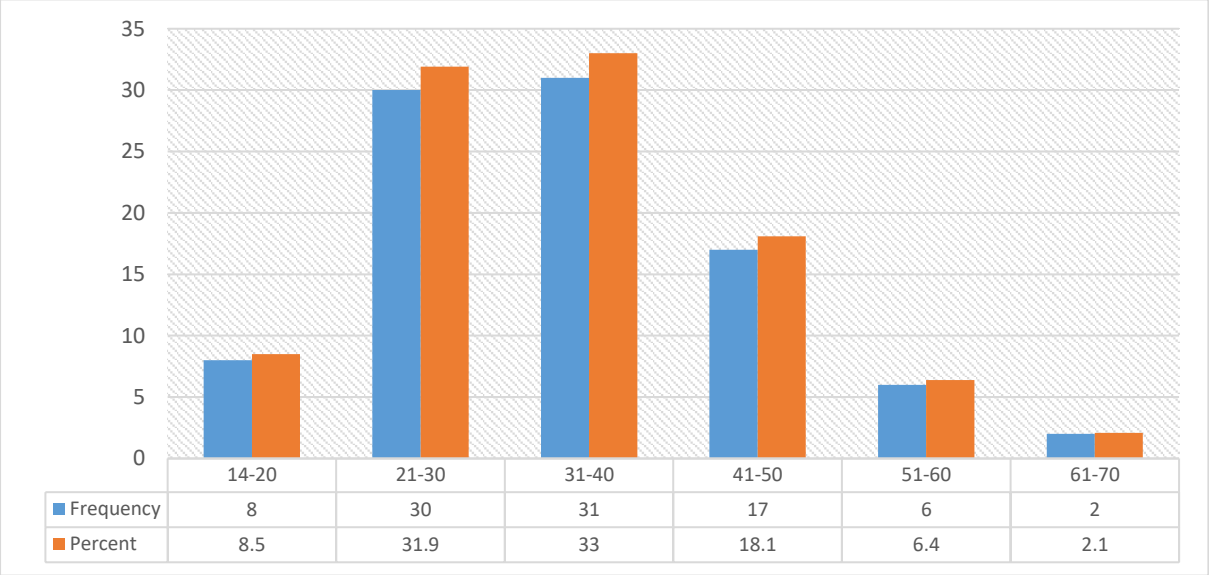
Section A of the questionnaire elicited information pertaining to the demographic characteristics of the respondents. In order to understand the general nature of the respondents, their socio-demographic profiles were sought. This section of the study presents the demographic profile information to provide a profile (without the names) of the respondents who participated in the study. The demographical profiles of the respondents are presented and address the following attributes of the respondents:

- Age
- Gender
- Marital status
- Race
- Education
- Employment
- Religion

Each of these characteristics is discussed.

4.3.1 Age of the respondents

The participants' ages were obtained from the files to establish whether age had any impact on the outcome of the forensic psychiatric observations of the alleged sexual offenders referred to Thabamoopo Hospital by the courts during the study period.



	14-20	21-30	31-40	41-50	51-60	61-70
Frequency	8	30	31	17	6	2
Percent	8.5	31.9	33	18.1	6.4	2.1

Figure 4.2: Age of respondents (n=94)

Figure 4.2. indicates that most n=31 (33%) of the respondents were between the ages of 31 and 40, followed by respondents aged between 21 and 30 at n=30 (32%), n= 17 (18%) respondents were between 41 and 50, n=8 (8%) were aged between 14 and 20, n=6 (6%) were aged between 51 and 60 and the smallest age group, n=2 (2%), was between 61 and 70.

4.3.2 Gender of the respondents

There was a need to determine the gender of the respondents to enable the researcher to make biographical inferences. Figure 4.3 depicts the gender of respondents.

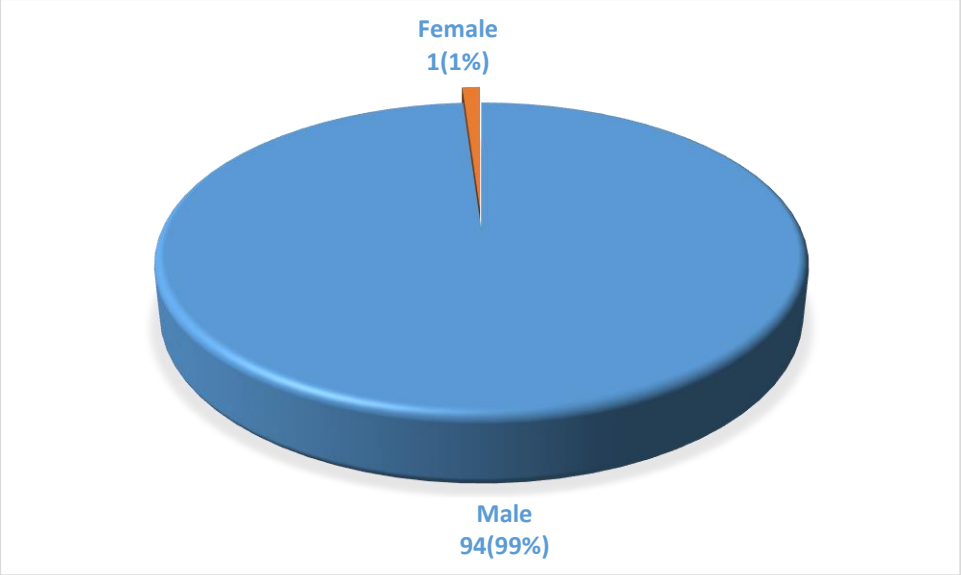


Figure 4.3: Gender of the participants (n=94)

Figure 4.3. shows that male participants constitute 99% of the respondents, and dominate their female counterpart, who constitutes the remaining 1%.

4.3.3 Marital status of participants

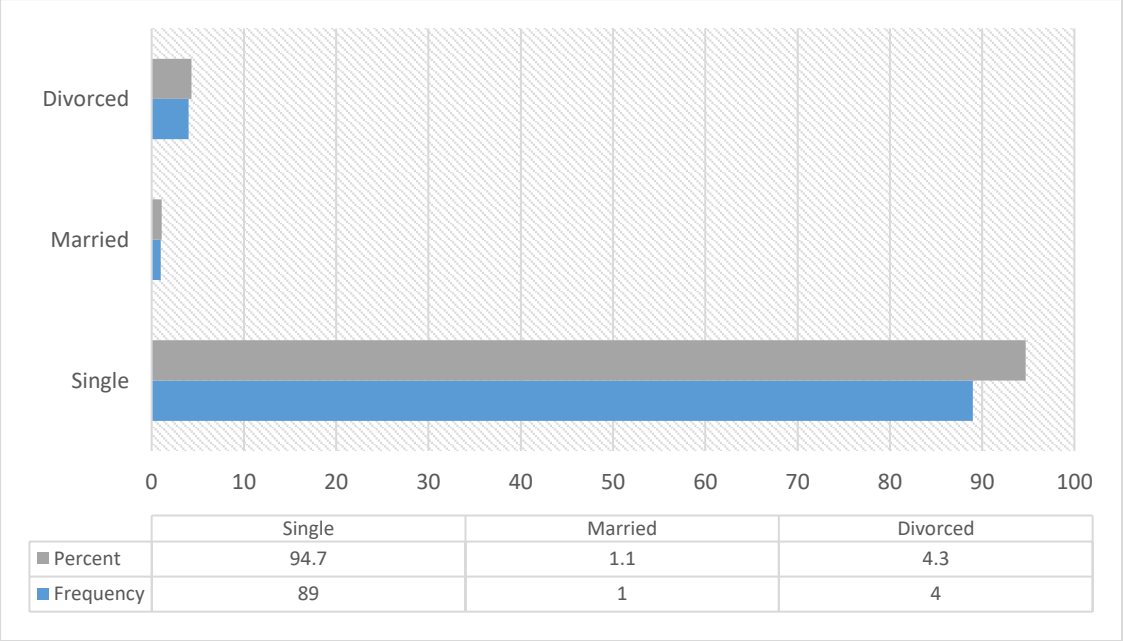


Figure 4.4: Marital status of participants (n=94)

Figure 4.4. shows that the majority of the respondents were single at n=89 (95%), followed by the n=4 (4%) of divorced respondents. Only 1% is married.

4.3.4 Race of the respondents

The study sought to know the race of the respondents. The records of the 94 participants who took part in this study are presented in table 4.1 below. It was essential to know the race of the respondents to allow the researcher to establish which race is more involved in sexual offending at Thabamoopo Hospital.

Table 4.1: Race of the respondents (n=94)

	Frequency	Percent
African	94	100

The results shown in table 4.1 reveal that all (100%) participants observed at Thabamoopo Hospital during the period of this study were black African.

4.3.5 Level of education

Table 4.2 (below) depicts the level of education amongst the study participants.

Table 4.2: Level of education (n=94)

	Frequency	Percent
None	9	9.6
Grade 1	1	1.1
Grade 2	6	6.4
Grade 3	4	4.3
Grade 4	5	5.3
Grade 5	7	7.4
Grade 6	5	5.3
Grade 7	8	8.5
Grade 8	14	14.9
Grade 9	10	10.6

Grade 10	13	13.8
Grade 11	5	5.3
Grade 12	3	3.2
Tertiary	1	1.1
Special school	3	3.2
Total	94	100

Table 4.2 above shows that 14(14.9%) of the respondents obtained grade 8 as their highest qualification. Furthermore, figure 4.2 shows that only one percent of the respondents has a tertiary education. (In addition, the table also indicates that at least 35% of respondents had less than primary education (Combined all less than grade 8 level). Finally, 3% of respondents have attained grade 12 and 3 (3.2%) went to a special school.

4.3.6 Employment status of the Respondents

Table 4.3 below presents the occupation status of the respondents.

Table 4.3: Employment status of the Respondents (n=94)

	Frequency	Percent
Employed	1	1.1
Unemployed	67	71.3
Self-employed	1	1.1
Disability Grant	25	26.6
Total	94	100

The occupations of the participants were classified as employed, unemployed, self-employed and on a disability grant. As shown in table 4.3, n=67 (71%) the majority of

the respondents were unemployed, n=25 (27%) were living on a disability grant as a source of income. Only n=1 (1.1%) was employed and n=1 (1.1%) self-employed.

4.3.7 Religion

. Respondents were asked to indicate their religious affiliation. The following Figure 4.4 presents their responses:

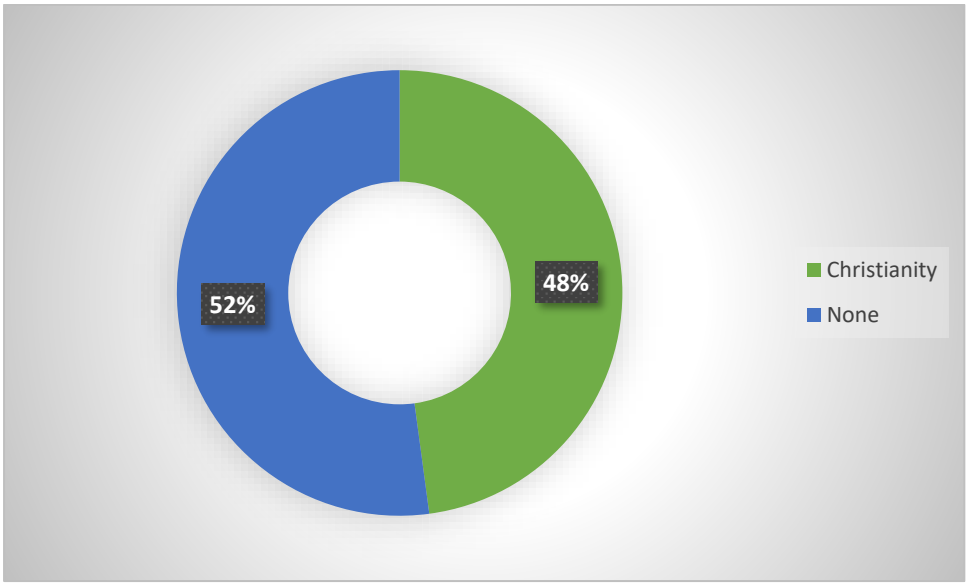


Figure 4.5: Religion of the respondents (n=94)

Figure 4.5 depicts that the majority of the participants n=49 (52%) did not indicate their religion, while at least n=45 (48%) reported that they followed the Christian religion.

4.4 Substance abuse

The information about the use of substances was obtained from the 94 alleged sexual offenders during the psychiatric observation period.

4.4.1 History of substance abuse

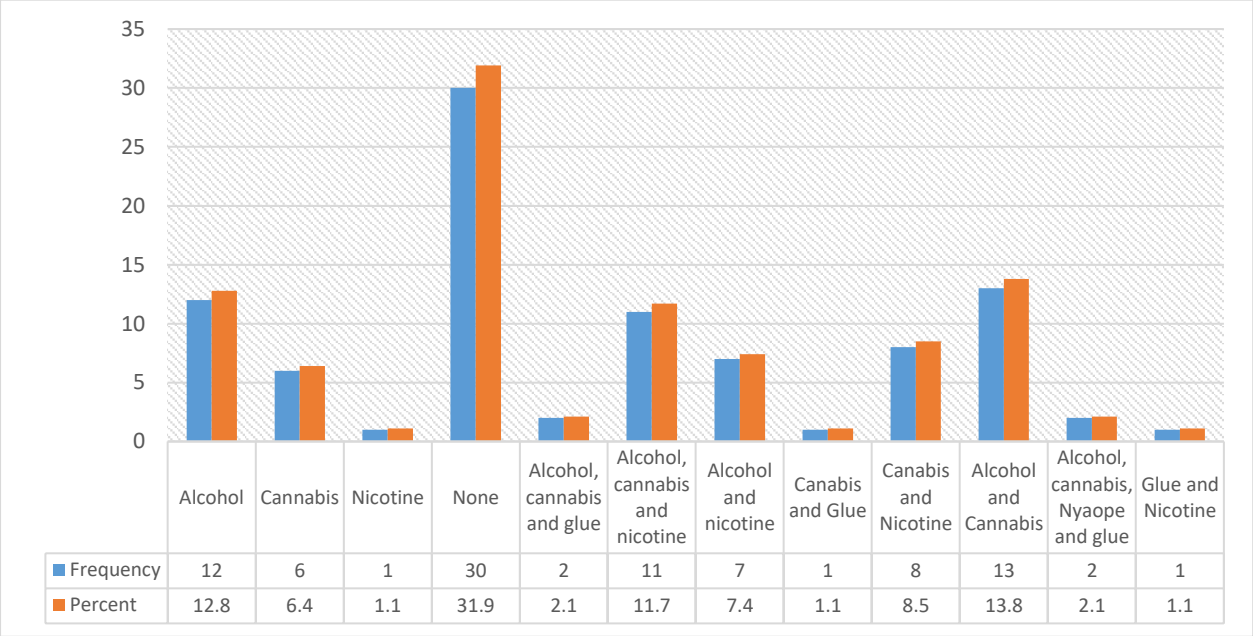
Table 4.4: Substance abuse (n=94)

	Frequency	Percent
Yes	63	67
No	31	33
Total	94	100

The table above represents the findings concerning the use of substances. Noteworthy is that the majority of alleged sexual offender n=63 (67%) participants were found to be abusing substances and a minority of n=31 (33%) were not using any substance.

4.4.2 Type of substance

The study explored the type of commonly used substances among alleged sexual offenders' participants to determine which substances were associated with sexual offending. Figure 4.6 below represents the types of substances commonly used by the 94 participants during the observation period.



	Alcohol	Cannabis	Nicotine	None	Alcohol, cannabis and glue	Alcohol, cannabis and nicotine	Alcohol and nicotine	Canabis and Glue	Canabis and Nicotine	Alcohol and Cannabis	Alcohol, cannabis, Nyaope and glue	Glue and Nicotine
Frequency	12	6	1	30	2	11	7	1	8	13	2	1
Percent	12.8	6.4	1.1	31.9	2.1	11.7	7.4	1.1	8.5	13.8	2.1	1.1

Figure 4.6: Type of Substance abuse by the participants (n=94)

Figure 4.6 above indicates that n=63 (67%) participants abuse only one substance: alcohol n=12 (12.8%) is the most abused substance followed by cannabis n= 6 (6.4%) and nicotine n=1 (1.1 %). Meanwhile, among the group of participants abusing more than one substance: a combination of alcohol and cannabis n=13 (13,8%) most frequent followed by alcohol, cannabis and nicotine n=11 (11,7%), cannabis and nicotine n=8 (8,5%), alcohol, cannabis, nyaope and glue n=2 (2,1%), alcohol, cannabis and glue n=2 (2,1%) and glue and nicotine n=1 (1,1%).

4.5 History of childhood abuse

The results of the question of a childhood history of sexual abuse among the 94 participants are indicated in the table below.

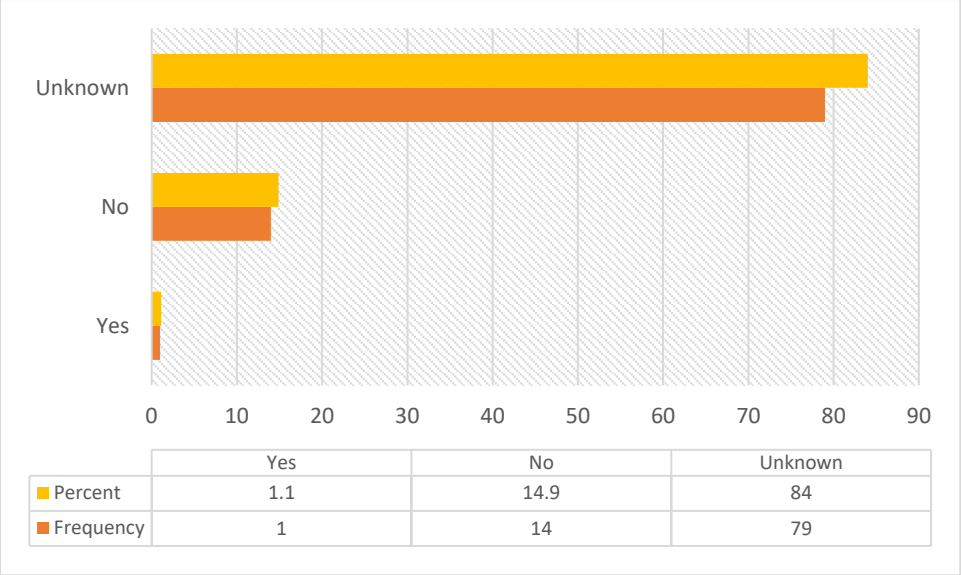


Figure 4.7: Previous childhood abuse among the respondents(n=94)

According to the findings represented by figure 4.7 above, for the majority of the participants, n=79 (84%) any history of childhood adversities was unknown. The findings further indicate that only a minority of participants were noted to be without any history of childhood adversities n=14 (14,9%), and only n=1 (1,1%) had a positive history of child abuse.

4.5.1 Type of child abuse

The table below indicates the type of child abuse of the participant who reported a history of child abuse.

Table 4.5: Previous history of child abuse among the participants(n=94)

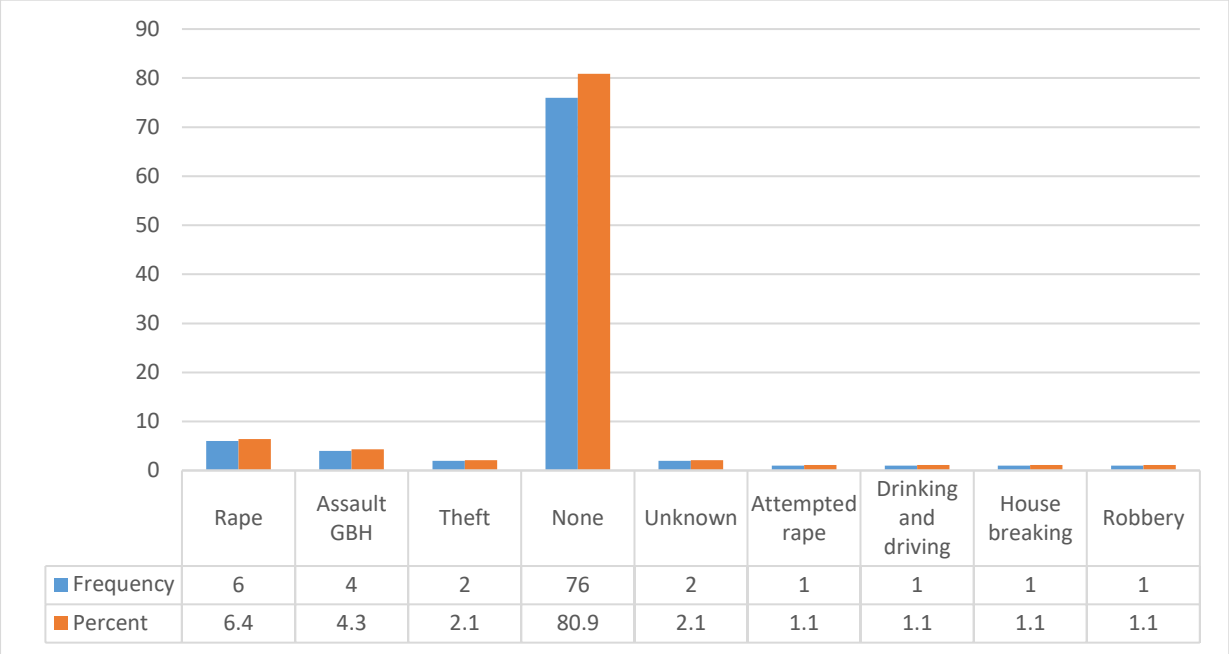
	Frequency	Percent
Neglect	1	1.1
None	93	98.9
Total	94	100

According to table 4.5 above, the nature of child abuse for one sexual offender was neglect n= 1(1,1%).

4.6 Forensic History

In this study, forensic history takes into consideration any previous offence that resulted in criminal charges. The table below indicates the previous history of offences among the alleged sexual offenders according to the records of forensic psychiatric observation during the study period.

4.6.1 Previous charges



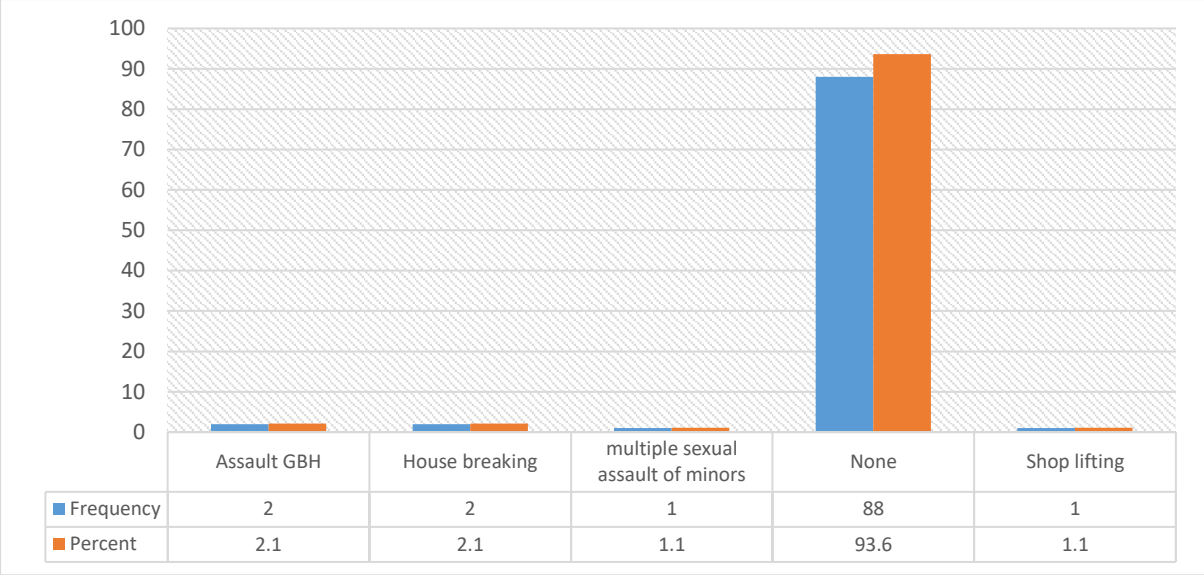
	Rape	Assault GBH	Theft	None	Unknown	Attempted rape	Drinking and driving	House breaking	Robbery
Frequency	6	4	2	76	2	1	1	1	1
Percent	6.4	4.3	2.1	80.9	2.1	1.1	1.1	1.1	1.1

Figure 4.8: Previous criminal charges of the respondents

The figure above shows that among 94 total participants, rape was the most common previous offence n=6 (6,4%) followed by assault GBH n=4 (4,3%), theft n= 2 (2,1%), previous unknown charges n=2 (2,1%), for attempted rape and drinking and driving, house breaking and robbery each n= 1(1,1%).

4.6.2 Other criminal charges

Other criminal charges in this study means previous criminal offences that lead to specific criminal charges among the participants with more than one previous charge. The table below indicates the findings of additional previous criminal charges among the participants:



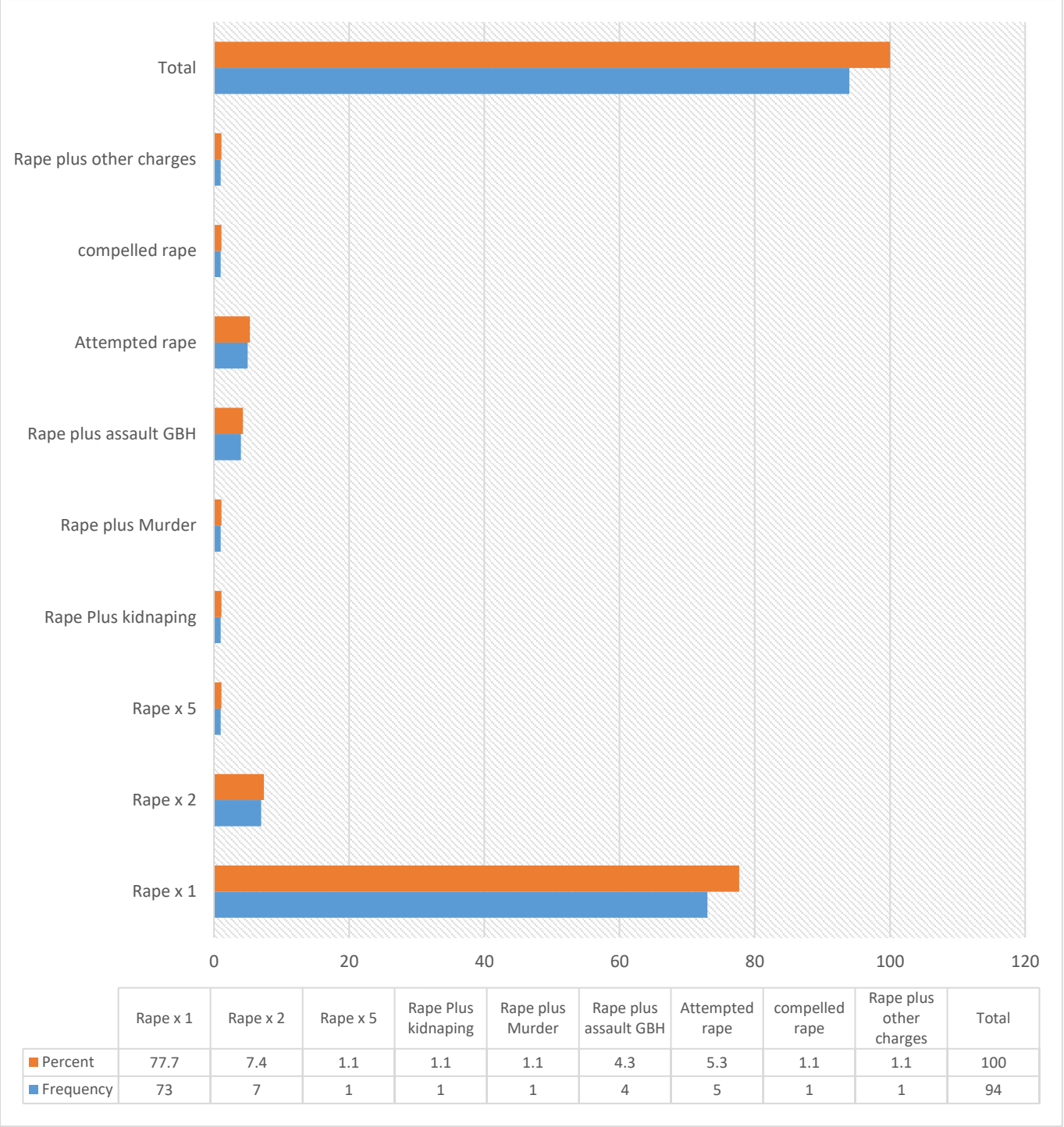
	Assault GBH	House breaking	multiple sexual assault of minors	None	Shop lifting
Frequency	2	2	1	88	1
Percent	2.1	2.1	1.1	93.6	1.1

Figure 4.9: Other previous criminal charges by the participants (n=94)

Figure 4.9. above shows that the most frequent other previous charge was assault GBH n=2 (2,1%) similar to housebreaking n=2 (2,1%), followed by multiple sexual assaults of minors (paedophilia) n=1 (1,1%) and shoplifting n=1 (1,1%).

4.6.3 Current criminal charges

This section represents all 94 alleged sexual offenders referred by the courts for forensic psychiatric observation during the study period with criminal charges of rape and all other accompanying current charges. The table below represents the findings:



	Rape x 1	Rape x 2	Rape x 5	Rape Plus kidnaping	Rape plus Murder	Rape plus assault GBH	Attempted rape	compelled rape	Rape plus other charges	Total
Percent	77.7	7.4	1.1	1.1	1.1	4.3	5.3	1.1	1.1	100
Frequency	73	7	1	1	1	4	5	1	1	94

Figure 4.10: Current criminal charges of respondents

Figure 4.10. represents the results as follows: Rape as a single offence accounts for the majority of criminal charges n=73(77,7%), rape x 2 n= 7(7,4%), rape x 5 n=1(1,1%), attempted rape n=5 (5,3%). In terms of rape in combination with other charges, rape and assault GBH n=4(4,3%) leads, followed by rape and kidnapping, rape and murder, rape and additional charges and compelled rape, each represented by n=1(1,1%).

4.7 CPA referral section

In this study, the reason for court referrals for forensic psychiatric observation is to determine the fitness to stand trial and the criminal responsibility of the alleged sexual offender under sections 77 and 78 respectively of the Criminal Procedure Act 51 of 1977. Figure 4.11 below represents the findings of referral sections:

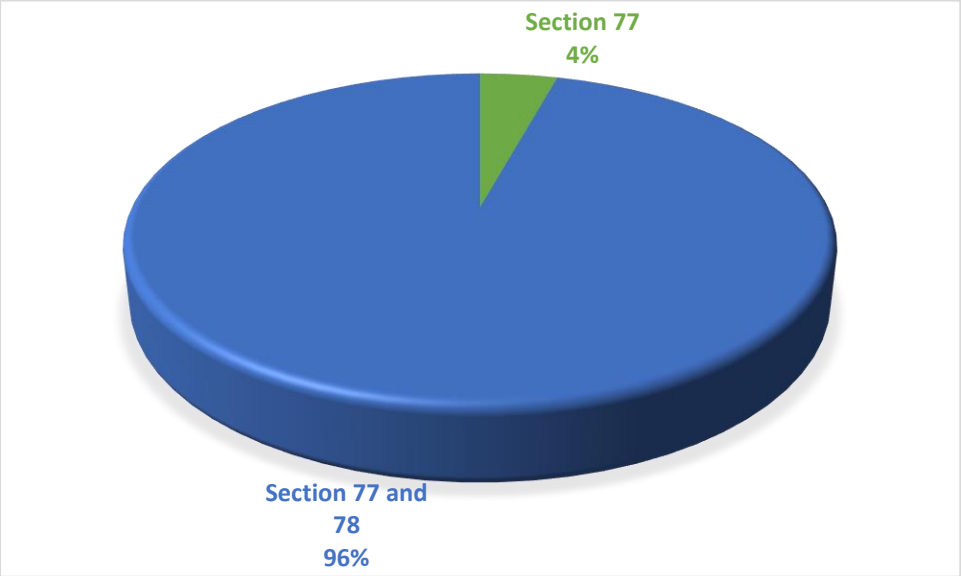


Figure 4.11: Referral section according to CPA 51 of 1977 for forensic psychiatric observation

Figure 4.11 above indicates that the court referred the majority of alleged sexual offenders under sections 77 and 78 for evaluation of both fitness to stand trial and criminal responsibility n=90 (95,7%); a minority of sexual offenders were referred under section 77 for only assessment of fitness to stand trial n=4 (4,3%).

4.8 Past psychiatric history

In this study, the past psychiatric history is the section focusing on the previously known diagnosis of mental illness before committing the sexual offence and before the forensic psychiatric observation. The table below depicts the overall findings of any previous history of mental illness:

4.8.1 Previous diagnosis

Figure 4.12 below illustrates the history of mental illness among the alleged sexual offenders according to previously attended mental health care services for a particular diagnosed mental disorder:

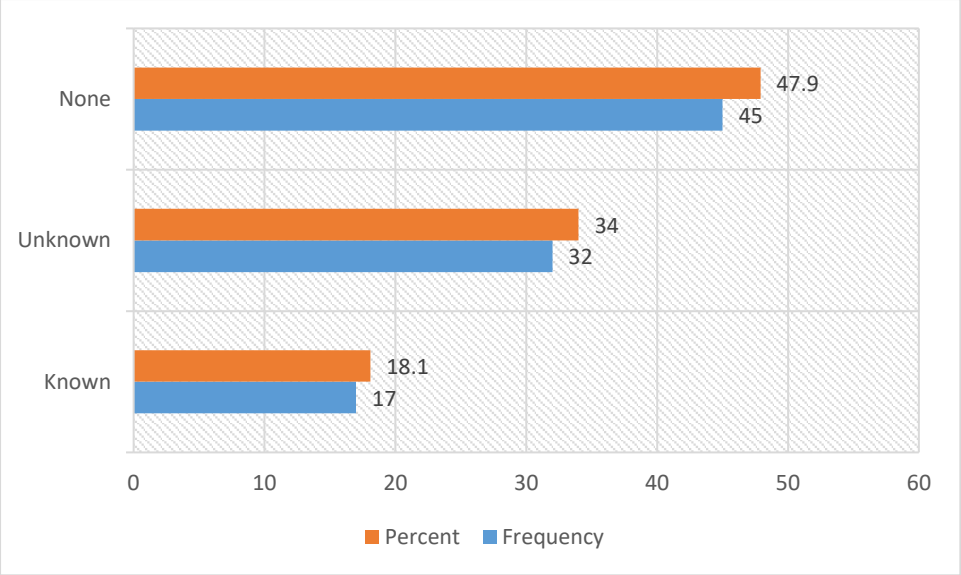


Figure 4.12: Psychiatric history of the respondents

Figure 4.12 above illustrates the psychiatric history of the respondents. According to these results, half of the participants had no previous mental condition n=45 (47.9%). Furthermore, the previous history of mental illness was unknown among n= 32 (34%) participants, and for a minority their history of mental illness was known n= 17 (18,1%).

4.8.2 Previous treatment

This section sought to determine how many of the participants had been treated for mental illness and related diagnoses prior to the forensic psychiatric observation.

The findings are represented in figure 4.13 below:

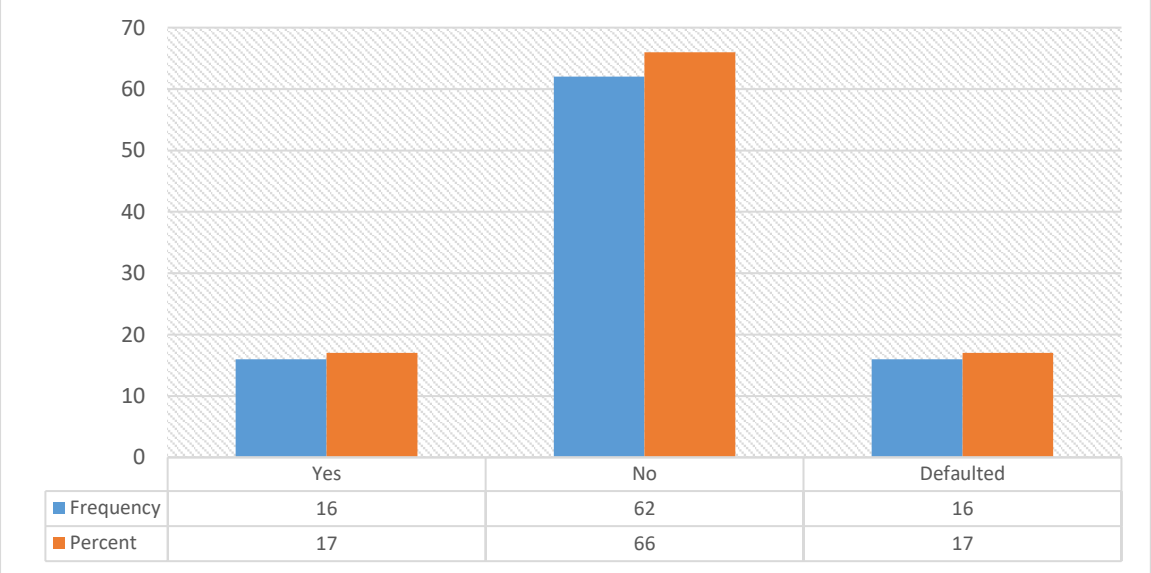


Figure 4.13: Previous treatment of mental condition

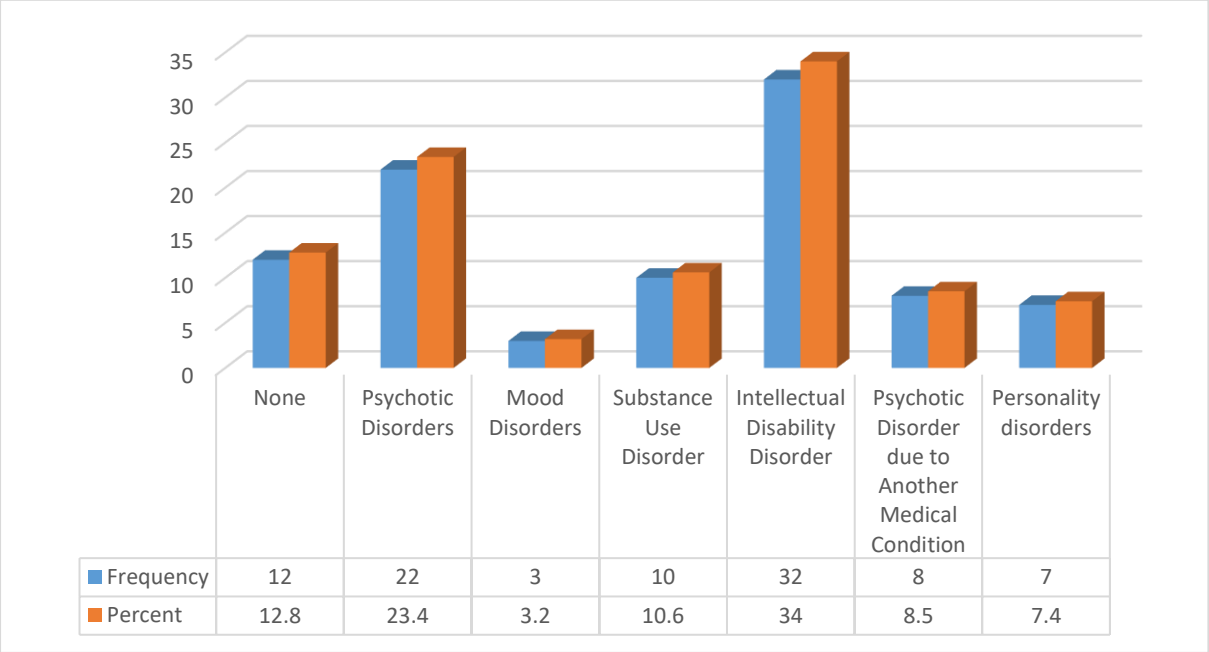
Figure 4.13 above shows the findings of previous treatment for mental illness. A significant number of the participants were not on any treatment, n=62 (66%), with a minority, n=16 (17%), who were already on treatment for mental illness or those who had defaulted on their treatment n=16 (17%).

4.9 Final diagnosis during observation according to DSM-5 diagnostic criteria

4.9.1 DSM-5 final diagnosis

During the forensic psychiatric observation all alleged sexual offenders referred by the court for psychiatric evaluations were assessed and diagnosed according to the DSM-5 diagnostic criteria to determine whether they had any mental illness during the observation period or at the time of committing the offence.

The results are demonstrated in figure 4.13 below:



	None	Psychotic Disorders	Mood Disorders	Substance Use Disorder	Intellectual Disability Disorder	Psychotic Disorder due to Another Medical Condition	Personality disorders
Frequency	12	22	3	10	32	8	7
Percent	12.8	23.4	3.2	10.6	34	8.5	7.4

Figure 4.14: Final DSM-5 diagnosis during forensic psychiatric observation

Figure 4.14 above represents the DSM-5 classification of mental conditions. The three most diagnosed DSM-5 conditions were intellectual disability disorder n=32(34%), psychotic disorders n=22 (23,4%), and substance use disorder n=10 (10,6%). These findings were followed by psychotic disorders due to another medical condition n=8 (8,5), personality disorders n=7 (7,4%), and mood disorders n=3 (3.4%). The other group of participants, n=12 (12, 8), had no mental illness during the observation period.

4.9.2 Specific diagnosis

Participants were diagnosed with the following psychiatric conditions according to the DSM-5 mental disorders classification.

Table 4.6: Specific DSM-5 final diagnosis

	Frequency	Percent
Adjustment disorder with depressed mood	1	1.1
Antisocial personality disorder	7	7.4
Bipolar and related disorder due to epilepsy	1	1.1
Cannabis and alcohol use disorder	2	2.1
Cannabis and opioid use disorder	1	1.1
Cannabis induced psychotic disorder	5	5.3
Cannabis use disorder	6	6.4
Epilepsy	2	2.1
HIV	5	5.3
Major depressive disorder	1	1.1
Mild intellectual disability disorder	16	17
None	12	12.8
Polysubstance use disorder	1	1.1
Schizoaffective disorder	3	3.2

Schizophrenia	13	13.8
Schizophrenia and cannabis use	1	1.1
Severe intellectual disability disorder	16	17
Traumatic brain injury	1	1.1
Total	94	100

The first 3 most common diagnoses were Intellectual disability disorder mild/ moderate and severe n=30 (34%), schizophrenia n=13 (13,8) and schizophrenia and cannabis use n=1 (1,1%) These were followed by schizoaffective disorder n=1 (1,1%) antisocial personality n=7 (7,4%), cannabis Induced psychotic disorder n=5 (5,3%), cannabis use disorder n=6 (6,4%),cannabis and alcohol use disorder n=2 (2,1%), cannabis and opioid use disorder n=1 (1.1), bipolar and related disorders due to epilepsy n=1 (1,1%), major depressive disorder n=1 (1,1), adjustment disorder with depressed mood n=1 (1,1%), psychotic disorders due to medical conditions such as HIV 5(5,3%), epilepsy n=2 (2,1%) and traumatic brain injury n=1 (1,1%).

4.9.3 Comorbidity

This section includes conditions that occurred in combination with the above-mentioned specific diagnoses. Table 4.7 below illustrates the most commonly diagnosed comorbidities:

Table 4.7: Comorbid diagnosis

	Frequency	Percent
Alcohol Intoxication	7	7.4
Alcohol use disorder	3	3.2
Bilateral eardrum perforation	1	1.1
Cannabis and alcohol use disorder	1	1.1
Cannabis use disorder	8	8.5

Epilepsy	7	7.4
Epilepsy and cerebral palsy	1	1.1
Epilepsy due to traumatic brain injury	2	2.1
Expressive aphasia	1	1.1
Glue use disorder	1	1.1
HIV	2	2.1
Mild intellectual disability disorder	2	2.1
None	54	57.4
Old stroke	1	1.1
Polysubstance use disorder	1	1.1
PTSD	1	1.1
Traumatic brain injury	1	1.1
Total	94	100

Table 4.7 above represents other psychiatric and related disorders co-occurring with the primary diagnosis. Cannabis use disorder is the most prevalent comorbidity n=8 (8,5%), followed by alcohol intoxication n=7 (7,4%), epilepsy n= 7 (7.4%), and alcohol use disorder n=3 (3,2%).

4.10 Observation outcome

4.10.1 Fitness to stand trial

This section outlines the outcomes of the forensic psychiatric observation in terms of assessing fitness to stand trial for the purpose of court proceedings. The findings are represented in figure 4.14 below:

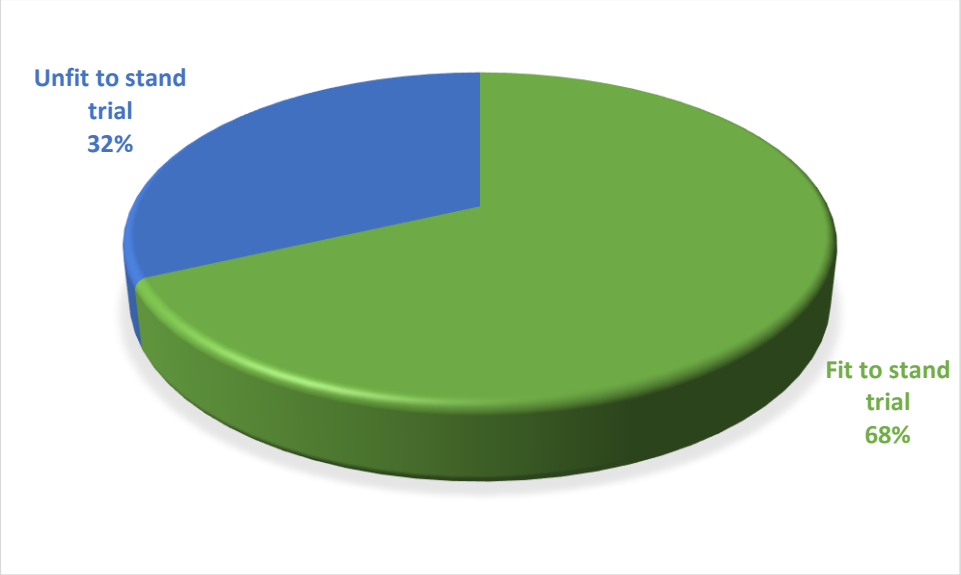


Figure 4.15: Distribution of alleged sexual offenders concerning fitness to stand trial (n=94)

According to the distributions shown in Figure 4.15 above, a significant number of the participants were found to be fit to stand trial n=64 (68,1) and a minority number of n=30 (31,9%) participants who were declared to be unfit to stand trial.

4.10.2 Criminal responsibility

Criminal responsibility in this study combined both legs of section 78 (a) and 78 (b) for assessment of alleged sexual offenders' capacity to appreciate the wrongfulness of their action and to act in accordance with the appreciation. The findings are represented in figure 4.16 below:

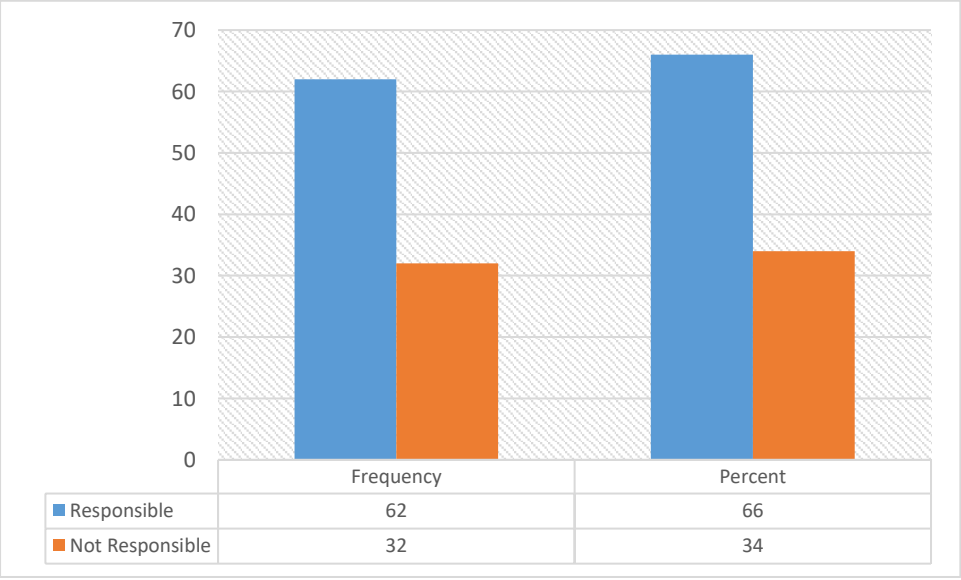


Figure 4.16: Distribution of alleged sexual offenders concerning criminal responsibility(n=94)

Figure 4.16 The majority of the observed sexual offenders were found to be criminally responsible n=62 (66%). However, n=32 (34%) were found not to be criminally responsible.

4.10.3 Fit to Stand Trial Reason

Figure 4.17 below shows the reasons for the observation outcomes among the group of alleged sexual offenders who were found fit to stand trial n=64 (68.1%).

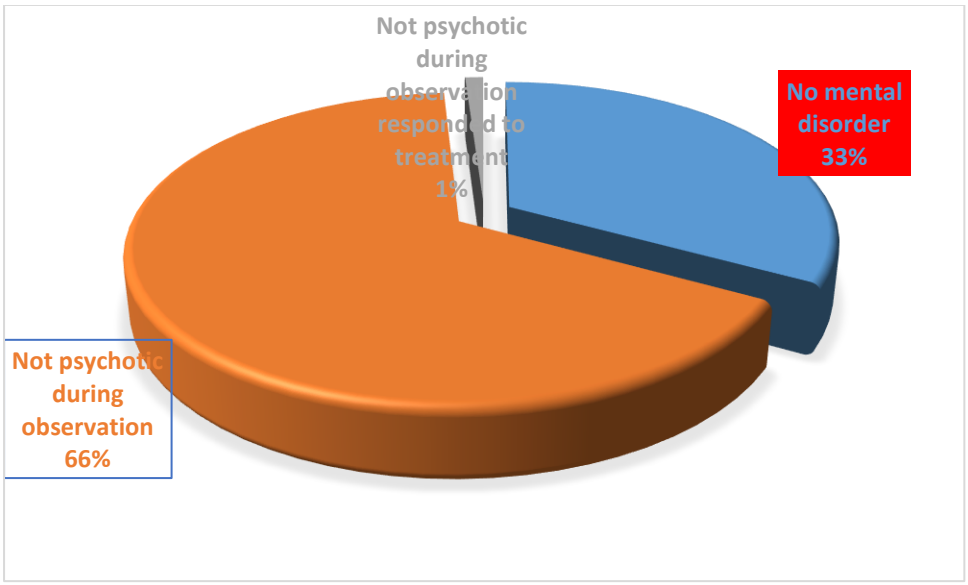


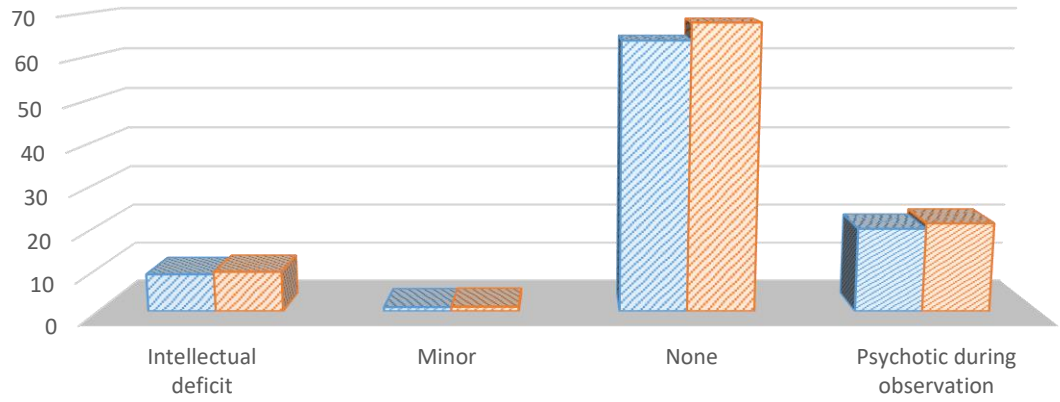
Figure 4.17: Forensic psychiatric outcome reasons in terms of being fit to stand trial

According to figure 4.17 above, a notable number of n=62 (66 %) alleged sexual offenders were able to understand court proceedings and were found to be mentally stable during the observation period. A noteworthy n=1(1,1%) participant responded to treatment started at the beginning of observation.

4.10.4 Unfit to Stand Trial Reason

Among the group found to be unfit to stand trial n=30 (31,9%), the reason was attributed to psychotic features during the observation period which would impede participants' ability to understand the court proceedings. The results are illustrated in

figure 4.18 below:



	Intellectual deficit	Minor	None	Psychotic during observation
Frequency	9	1	64	20
Percent	9.6	1.1	68.1	21.3

Figure 4.18: Forensic psychiatric outcome reasons for being unfit to stand trial

Most of the offenders who were found unfit to stand trial were psychotic during observation n=20 (21.3%). These were followed by those who were affected by their intellectual deficit n=9 (9.6%) and a minor participant n=1(1.1%) were underage

4.10.5 Criminally Responsible Reason

For all participants found to be criminally responsible 62(66%), there was no impact of mental illness on their capacity to appreciate the wrongfulness of their actions and the ability to act in accordance with that appreciation when they committed the alleged sexual offence crime. In addition, 7 participants were intoxicated with alcohol on the day of committing the alleged sexual offence. The findings are represented in figure 4.19 below:

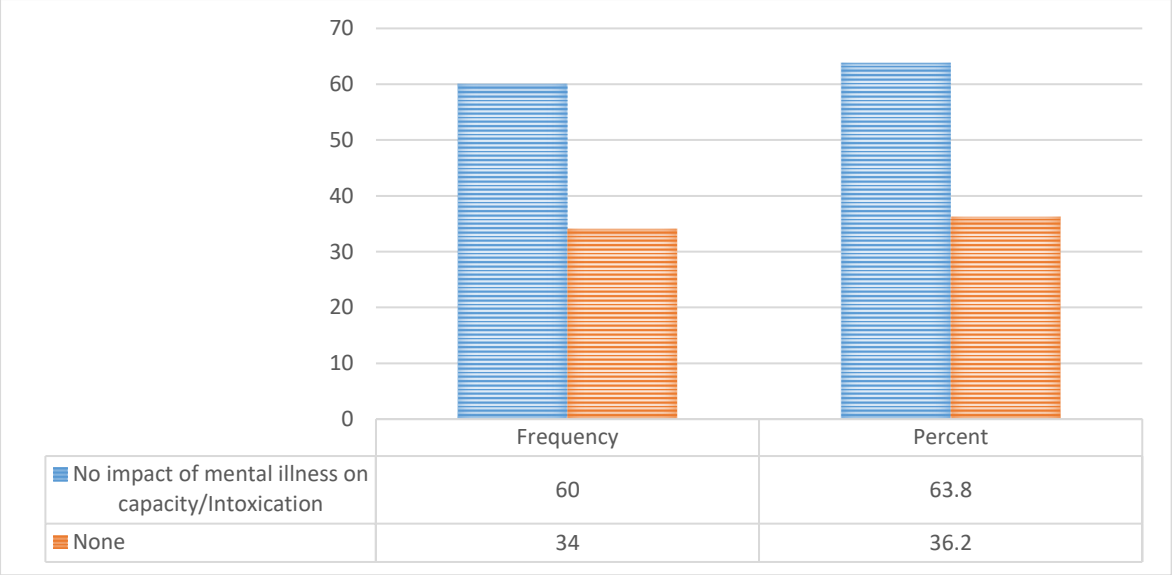


Figure 4.19: Observation outcome reason for being found criminally responsible

Figure 4.19 above shows that among the total of 62 (66%) who were found to be criminally responsible, 60 (63,8%) participants evinced no impact of mental illness at the time of committing the alleged sexual offence.

4.10.6 Not Criminally Responsible Reason

A total number of 32(34%) participants were found not to be criminally responsible due to the impact of mental illness on their capacity to appreciate the wrongfulness of their action and on their ability to act in accordance with the appreciation.

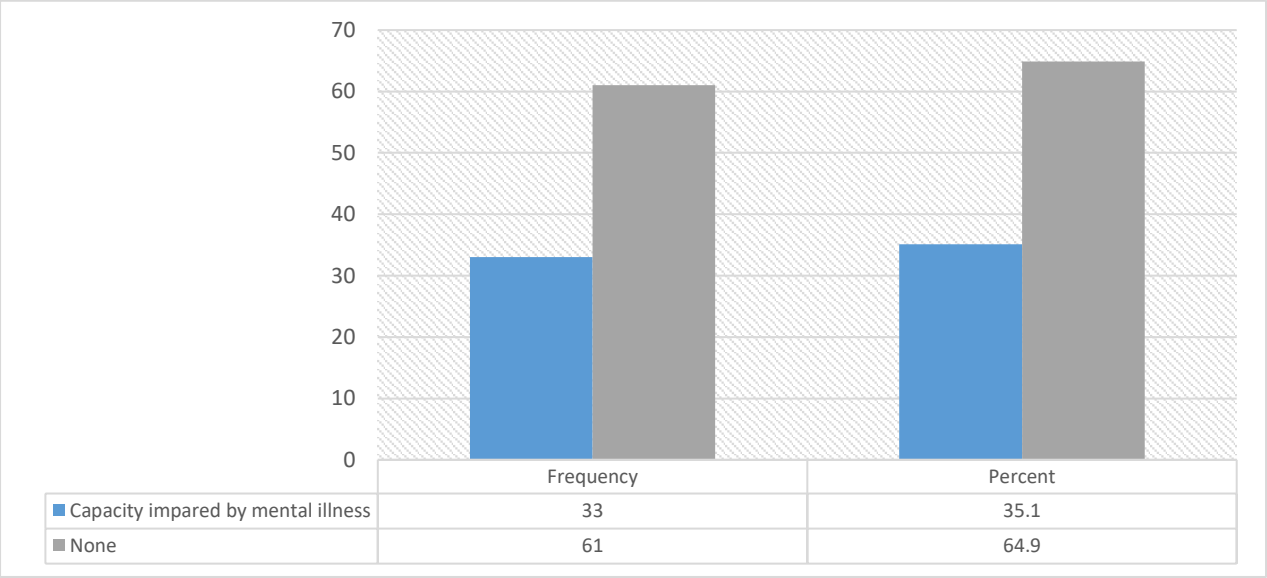


Figure 4.20: Reason for not being criminally responsible

A total number of 33(35,1%) alleged sexual offender's capacity was impaired by mental illness.

4.10.7 Association between DSM-5 Diagnosis and fitness to stand trial

Table 4.8: Association between DSM-5 and fitness to stand trial

Final DSM-5 Diagnosis	**Fitness to stand trial**			
	N	**Fit to stand trial**	**Unfit to stand trial**	**P-value**
None	12	12(100%)	0(0%)	
Psychotic disorders	22	9(40.90%)	13(59.10%)	
Mood disorders	3	3(100%)	0(0%)	
Substance use disorder	10	10(100%)	0(0%)	P< 0.000
Intellectual Disability Disorder	32	17(53.10%)	15(46.90%)	
Psychotic disorder due to another medical condition	8	6(75%)	2(25%)	
Personality disorders	7	7(100%)	0(0%)	
Total	94	64(68.10%)	30(31.90%)	**$X^2 6=25.949$**

Table 4.8 above illustrates the association between the final DSM-5 diagnoses with fitness to stand trial outcome. Noteworthy is that all alleged sexual offenders without any mental illness, together with those diagnosed with personality disorders, substance use disorder and mood disorders were found fit to stand trial.

Among the group diagnosed with psychotic disorders n=22 13 (59.10%) were unfit to stand trial vs. n=9(40.90%) fit to stand trial. Of the group with intellectual disability disorder n=33, the majority were found fit to stand trial n=17 (53.10%) compared to n=15 (46,90%), not fit to stand trial. For those with a diagnosis of psychotic disorder due to another medical condition n=8 majority were fit to stand trial n= 6 (75%) opposed to a minority who were unfit to stand trial n= 2 (25%).

A chi-square test of independence was performed to examine the relation between DSM-5 diagnosis and fitness to stand trial. The relation between these variables was significant, $\chi^2(6, N = 94) = 25.949$, $p = .0000$. The participants fit to stand trial were less likely to be associated with final a DSM-5 diagnosis.

4.10.8 Association between DSM-5 diagnosis and criminal responsibility

Table 4.9: The association between DSM 5 diagnosis and criminal responsibility

	Criminal Responsibility			
Final DSM-5 Diagnosis	**N**	**Responsible**	**Not Responsible**	**P-value**
None	12	12(100%)	0(0%)	**P < 0.000**
Psychotic disorders	22	8(36.40%)	14(63.60%)	
Mood disorders	3	3(100%)	0(0%)	
Substance use disorder	10	10(100%)	0(0%)	
Intellectual disability disorder	32	17(53.10%)	15(46.90%)	
Psychotic disorder due to another medical condition	8	5(62.50%)	3(37.50%)	
Personality disorders	7	7(100%)	0(0%)	
Total	94	62(66%)	32(34%)	**$X^2$6=27.487**

Table 4.9 represents the relationship between the final DSM-5 Diagnosis and criminal responsibility. Remarkably, all alleged sexual offenders without mental illness, those diagnosed with personality disorders, substance use disorder and mood disorders were found to be criminally responsible. Alleged sexual offenders on the psychotic disorders spectrum n=22, 14(63.60%) were not criminally responsible contrary to n=8 (36.40%), who were criminally responsible.

Among those diagnosed with intellectual disability disorder n=32, the majority were found criminally responsible n=17 (53.10%) as opposed to n=15 (46,90%) who were found to be not criminally responsible.

Of the group with Psychotic disorders due to another medical condition diagnoses n=8, n=5 (62.50%), were criminally responsible versus n=3 (37.50%) not criminally responsible.

A chi-square test of independence was performed to examine the relation between DSM-5 diagnosis and criminal responsibility. The relation between these variables was significant, $\chi^2(6, N = 94) = 27.487, p = .00$

Chapter 5

5.1 Description of the study sample

Sexual offenders are closely associated with being male, single, of low educational levels, having unskilled jobs and being middle aged (Hesselink & Booysens, 2017).

These results verify that most of respondents in this study are male. This is similar to findings of previous South African studies of sexual offenders which had only one female participant. (Govender, 2014; Sokudela, 2016).

This study had only one female participant who became involved in a sexual offence through compelled rape. This ties in with the previously mentioned South African study where the only female subject was charged with compelled rape (Sokudela, 2016). These findings suggest that females may be involved in facilitating sexual offences without any intention of engaging in physical sexual assault. Other studies had common findings of just one female sexual offender (Govender, 2014). However, it should be noted that studies of female sexual offenders are generally limited; however, females may be involved in sexual offending behaviour, although the percentage of female offenders is lower than male (Da Costa *et al.,* 2014). All other participants in this study were male; thee findings agree with previous international and local studies where the whole samples or most of them consisted of male sex offenders (Sigler, 2017; Chiremba, 2015; Adjorlolo & Egbenya, 2016; Govender, 2014; Sokudela, 2017; Hesselink & Booysens, 2017). The findings of the current study indicate males are far more involved in sexual offence crimes than females.

The majority of the sexual offenders were in their middle adulthood between 30 and 40, n=31 (33%) and 21 and 30, n= 30 (32%) and 41 to 50, n=17 (18%). Those in the extreme ages above 50 and lower ages below 20 constituted the minority, n=8 (8%) each. This finding is in accord with a study conducted in Nigeria that reported that the majority of sex offenders were adults, younger than 41, 8% were juveniles, 5.1% were between 41 and 60, and 1.6% were older than 61 (Chiremba, 2015). In addition, gang rape is associated with perpetrators younger than 34, while pedophilia and incest are associated with older ages (Romi, 2009). The results of this study are similar to those of other studies and support the association between sexual offending behaviour and middle age (Hesselink & Booysens, 2017)

It was important in this study to determine the marital status of participants in anticipation of the support they receive from people they live with. Furthermore, their sexual interpersonal relationships could be a determinant of social-cognition vulnerability to sexual offending behaviour, according to sexual offence theories (Ward, Polaschek and Beech, 2006).

A significant number of the respondents were single at n= 89(95%), followed by divorced, n=4(4%), and only n= 1(1%) subject was married. This supports the notion that sexual offenders are generally single (Govender, 2014; and Hesselink & Booysens, 2017).

The results shown in Table 4.1 reveal that all (100%) participants observed at Thabamoopo Hospital during the period of this study were black African. This finding corresponds with the geographical situation of the current study. According to the prison population, indicating the South African racial profile, the majority of sexual offender inmates are black African men, regardless of the multiracial state of the country (Schütte, 2013). However, other local studies found mixed-race offenders, although still dominated by blacks, followed by whites, mixed race, and Indians (Govender, 2014).

A large number of participants in this study dropped out of school at the primary level, 35%. Only 14,9% completed grade 8, 3% passed matric, 1% had reached a tertiary level, 3.2% attended a special school and 9.6% did not go to school at all. These findings reflect those of a local study, where only one individual among a sample of 128 participants had tertiary education and most had no high school qualification (Govender, 2014). Similar findings were reported in a Nigerian study, where most sexual offenders (87%) had completed grade 10 or below (Chiremba, 2015). The fact that most participants had a grade 8 level of education might be indicative of the participants' ability to appreciate wrongfulness of their action in terms of sexual offence.

Respondents were asked to indicate their current occupation status during the observation. Most of the individuals were unemployed, n=67(71%), n=25 (27%) were living on disability grants for mental illness and only 1% were employed and self-employed. Sexual offending behaviour is closely linked to a low socioeconomic status, which correlates with being illiterate or having a low level of education (Sigsworth,

2009). Moreover, in South Africa, the high rate of unemployment is alarming (Govender, 2014), particularly among mentally ill individuals. This group may suffer poor cognitive functioning or encounter stigmatisation, which results in their resorting to disability grants as a source of income. Furthermore, in the current study most of the participants had a low level of education, were diagnosed with psychotic and intellectual disability disorders. This explains the high rate of unemployment and the number of individuals drawing a disability grant.

None of the religious beliefs represented by the participants in this study interfered with the proportion of sexual offenders in terms of the outcome of the forensic psychiatric observation between January 2015 to December 2018 at Thabamoopo Hospital.

Most of the participants, n=49 (52%), did not indicate their religion, while at least n=45 (48%) indicated that they follow the Christian religion. The study area is predominantly rural; this profile may indicate that cultural affiliation is also a possibility. Even though there are no previous reports focusing on sexual offenders and religion, it is believed that religion or cultural beliefs may have an impact on moral values, finding the meaning of mental condition and treatment compliance (Zadozdzon and Wrotkowska, 2017). Understanding these factors may contribute to better management and rehabilitation of mentally ill sexual offenders.

5.2 Information regarding the history of substance abuse

Previous studies demonstrate that substance abuse is a situational contributing factor in sexual offence crimes (Govender, 2014). In this study, most alleged sexual offenders, n=63 (67%), were found to be abusing substances. Only a minority, n=31 (33%), had no previous history of substance abuse. In terms of the specific substance of abuse, alcohol, n=12 (12.8%), was the most abused substance, followed by cannabis, n=6 (6.4%), and nicotine n=1 (1.1 %).

Among the group abusing more than one substance, commonly combined substances were alcohol and cannabis, n=13 (13,8%), followed by alcohol, cannabis and nicotine, 11(11,7%), cannabis and nicotine, n=8 (8,5%), alcohol, cannabis, nyaope and glue, n=2 (2,1%), alcohol, cannabis and glue, n=2 (2,1%), and glue & nicotine n=1(1,1%). According to these records, alcohol is the most commonly abused substance followed by cannabis and nicotine, either as a single drug or in combination. This result

correlates with a study in Nigeria that demonstrates a high rate of alcohol and cannabis abuse, as indicated by 82.9%; 28.6% alcohol abuse and 37%; 5.7% cannabis abuse among incarcerated sex offenders and non-sex offenders' (Adayonfo & Akanni, 2019).

Noteworthy is that glue and nyaope show a lesser pattern of abuse in this study. Almost seven participants in this study were under the influence of alcohol intoxication during the time of the alleged sexual offending. This is similar to the findings of the study conducted among incarcerated sex offenders in Namibia, which shows that almost 42,3% of offenders were intoxicated while committing a sexual offence (Chiremba, 2015).

A study conducted in Washington, focusing on the role of marijuana in sexual assaults, found that alcohol was the substance most commonly used, while cannabis was the most abused substance in terms of specific substances of abuse (Floyd, 2017).

The high risk of offending sexual behaviour among sexual offenders is attributed to the biological dysregulation of cognitive functioning and deficit information processing, resulting in an impaired cognitive ability to evaluate social behaviour cues and poor judgment during alcohol intoxication (Abracen *et al*., 2017). Furthermore, alcohol abuse was found to increase the likelihood of sexual re-offending when there is a comorbid primary psychiatric condition (Kingston *et al.,* 2015).

5.3 Background history of childhood abuse among alleged sexual offenders

According to the multifactorial theory of sexual offending, early development plays a critical role in the formulation of offence-related vulnerability in combination with current psychosocial situational vulnerability in triggering sexual crimes (Marshal and Barbaree,1990). This notion suggests that understanding the history and nature of child abuse is crucial in case formulation of the individual offender for adequate rehabilitation and clinical management.

According to the findings of the current study, most of the participants, n=79 (84%), had no known history of childhood adversities, a minority of the participants were noted to be without any history of childhood adversities n=14 (14,9%) and only n=1(1,1%) had a positive history of neglectful child abuse. According to the behavioural theory of sexual abuse, sexual offending behaviour stems from learning and conditioning theory where different rewards, punishments, antecedents, and consequences may result in learning improper sexual habits. This theory goes together with learning by association

in some instances, where observing gender-based violence might result in a child replicating such behaviour later in life (Marshal & Barbaree,1990 and Romi, 2009).

The literature supports a link between childhood victimisation and becoming an abuser later in life as a result of the failure to cope with the pain of victimisation (Da Costa *et al*., 2014; Hesselink & Booysens, 2017). A local study conducted among 11 cases of youth sex offenders, demonstrates that all youth offenders reported multiple childhood adversities such as poor attachment with primary caregivers, childhood sexual abuse by immediate or extended family members and exposure to violence. The study suggests that the abused become abusers later in life as a coping mechanism to release own experience as victims (Hesselink & Jordaan, 2018).

Contrary to this opinion, the Nigerian study among 29 inmates charged with sexual offence found that only a minority, 13.79%, reported a history of being sexually abused during childhood (Aborisade & Shontan, 2017). This suggests that a history of child abuse may play a vulnerable role in interaction with other factors such as substance abuse or mental disorders among sexual offenders.

According to theories of sexual abuse, child abuse information is crucial for records during forensic psychiatric evaluations of sexual offenders as previous childhood abuse is associated with the abused/abuser notion. Moreover, the information may assist in the holistic biopsychosocial management of sexual offenders in terms of planning adequate care, treatment and rehabilitation.

5.4 Forensic Details

5.4.1 Background of previous forensic information

The current study reveals that rape was the commonest previous offence, n=6 (6,4%), followed by assault GBH, n=4 (4,3%), theft, n=2 (2,1%), previous unknown charges, n=2(2,1%), attempted rape, drinking & driving, house breaking & robbery each at n=1(1,1%). According to these results, a previous rape case correlates with future re-offending among the participants.

Other associated previous charges included: assault GBH and housebreaking, n=2 (2,1%) each, followed by multiple sexual assaults of minors (paedophilia), n=1 (1,1%), and shoplifting, n=1 (1,1%). This result indicates that, for the majority of the participants, the current sexual offence considered under the psychiatric observation was the index criminal offence. These findings suggest a low re-offending rate among

this group of sexual offenders. However, the prediction of future offences, with regard to sexual offences can only be concluded with follow-up studies of the same sample.

5.4.2 Current Criminal Charges

Most of the participants in this study had been charged with a single rape offence, n=73 (77,7%), followed by rape charges on two occasions, n=7 (7,4%), rape on 5 occasions, n=1 (1,1%), and attempted rape, n=5 (5,3%). In terms of rape in combination with other charges, the highest number had been charged with rape and assault GBH, n=4 (4,3%), followed by rape and kidnapping, rape and murder, rape and other charges and compelled rape, each represented by n=1 (1,1%). Another local study found that among 108 offenders charged with rape three were charged with raping twice, two had four rape charges, one out of 9 of those charged with sexual assault had three charges of sexual assault, and one was charged with a combination of rape and sexual assault (Govender, 2014)

5.4.3 Current Criminal Procedure Referral Section

The court referred the majority of alleged sexual offenders under sections 77 & 78 for evaluation of both fitness to stand trial and criminal responsibility, 90 (95,7%), and a minority of sexual offenders were referred under sections 77 for assessment only of fitness to stand trial, 4 (4,3%). This study found that the reasons for court referral for forensic psychiatric observation was to determine fitness to stand trial and the criminal responsibility of the alleged sexual offender under sections 77 and 78, according to Criminal Procedure Act 51 of 1977.

The reasons for the court decisions in terms of pre-screening for mental illness is beyond the scope of this study. In addition, the reason for referral under a particular section is not stated in the J138 issued by the court; hence the current study is limited to commenting exclusively on the referral sections.

5.5 Data of psychiatric information

5.5.1 Past psychiatric history of the respondents

According to this study's findings, almost half of the participants had no previous mental condition, 45 (47.9%). Noteworthy is that the previous history of mental illness was unknown among 32 (34%) participants and only a minority of the respondents were known mental health care users with primary psychiatric disorders, 17 (18,1%). Furthermore, a significant number of the participants were not on any treatment for

mental illness, 62 (66%), in comparison with the minority, 16 (17%), who were already on treatment for mental illness and 16 (17%) who had defaulted on their treatment.

5.5.2 Forensic psychiatric observation outcome according to DSM-5 diagnostic criteria.

The majority of the respondents were diagnosed with mental conditions during the observation process, n= 82 (87.2%), opposed to n=12 (12.8%) respondents without any diagnosis. This result correlates with other study findings of a high prevalence of mental illness among sexual offenders (Govender, 2014; Sokudela, 2016; Booth & Gulati, 2014, Kingston *et a*l., 2015, Valenca *et al*., 2015; Ramouthar, 2015; Eher *et al*., 2019; Ehigiator & Obarisiagbon, 2018). In contrast, a study conducted in the United Kingdom of 121 participants consisting of two groups, one with diagnoses of mental conditions and one without any diagnosis of mental conditions, found that there is no direct relationship between mental health and crime as only 57 (47,17% participants were diagnosed with mental conditions (Hall *et al*., 2020).

In the current study, the most common DSM-5 diagnostic spectrum was made up of: intellectual disability disorder, n=32(34%), psychotic disorders, n=22 (23,4%), and substance use disorder, n=10 (10,6%). The subsequent diagnoses were psychotic disorders due to another medical condition, n= 8 (8,5), personality disorders, n=7 (7,4%), and mood disorders, n=3(3.2%).

A related local study of a sample of 128 child sexual offenders over a three-year period in Sterkfontein Psychiatric Hospital in Gauteng, found that the predominant diagnoses were substance-related and intellectual disability disorders, n=35 (27,34%) each (Govender, 2014).

With regard to specific diagnoses, the leading condition was intellectual disability disorder (mild/ moderate or severe), n=30 (34%), followed by schizophrenia n=13(13,8), cannabis-related disorders n=11(11,7%), antisocial personality disorder n=7(7,4%) and psychotic disorders due to another medical conditions such as HIV, n=5(5,3%), epilepsy, n=2 (2,1%), and traumatic brain injury, n=1(1,1%). It is noteworthy that mood disorders were found to be less common. Other studies found intellectual disability disorder to be the most common diagnosis among sexual offenders diagnosed with mental disorders (Valenca *et al*., 2015; Ramouthar, 2015). The recurring diagnosis of intellectual disability disorder in this study correlates with

the conclusion reached by Adjorlolo *et al*., that impairment in higher cognitive flexibility and lower executive abilities (inhibition) might influence tendencies leading to the committing of sexual offences among both juvenile and adult males (Adjorlolo and Egbenya, 2016).

In opposition to this order of order of diagnostic findings, a study conducted in Canada shows a high prevalence of mental illness among sexual offenders with diagnoses such as personality disorders, 47%, depressive disorders, 43%, alcohol dependence, 42%, substance dependence, 38%, intellectual disability disorder, 31%, anxiety disorders, 28%, attention deficit hyperactivity disorder, 20%, psychotic disorders, 16%, bipolar and related disorders, 13% and dementia, 10% (Booth & Gulati, 2014).

An Australian study of 1511 inmates found that 1250, (92,9%), participants had a diagnosis of mental disorders, predominated by personality disorders (53,6%) mostly cluster B (47,8%), followed by paraphilic disorders (43,3%) and alcohol use disorder (40,3%) (Eher *et al.,* 2019). Similarly, a New York study conducted on 3194 male sexual offenders revealed a 2.78% diagnosis of personality disorders, mostly borderline and antisocial personality disorders (Sigler, 2017).

According to this study, cannabis use disorder is the most prominent comorbid condition, n=8 (8,5%), followed by alcohol intoxication, n=7 (7,4%), epilepsy, n=7 (7.4%), and alcohol use disorder, n=3 (3,2%).

The predominance of alcohol abuse among sexual offenders is associated with the impairment of cognitive functioning and deficit information processing, reducing cognitive ability to evaluate social behaviour cues and poor judgment (Abracen *et al*., 2017). Moreover, alcohol abuse is associated with a high risk of sexual re-offending, especially when there is a comorbid primary psychiatric diagnosis (Kingston *et al*., 2015).

5.6 Observation Outcome

5.6.1 Observation outcome about fitness to stand trial

A significant number of the participants were fit to stand trial, 64 (68,1) with a minority of n= 30 (31,9%) participants who were evaluated to be unfit to stand trial. Another South African study with similar findings focused on forensic psychiatric observation outcomes of 128 sexual offenders of minors. This study showed that the majority of the participants, n=72(56,25%) were found fit to stand trial and a minority, n= 48

(37,5%) were found to be unfit to stand trial (Govender, 2014). In agreement with these findings, Stutte and Subramaney found that among their total sample of forensic psychiatry observation, a significant number of 67% were fit to stand trial (Stutte & Subramaney, 2013).Contrary to the current study findings, Sokudela found that among a sample of 62 sexual offenders n=44 (70,9%) were diagnosed with mental illness. However, only less than half of the subjects with mental illness were found fit to stand trial 49%, and 51% were not fit to stand trial (Sokudela, 2016).

Among the group found to be fit to stand trial n=62 (66 %), alleged sexual offenders were found to be able to understand court proceedings and were found to be mentally stable during the observation period. Noteworthy is that n= 1(1,1%) participant responded to treatment started at the beginning of observation and joined the fit to stand trial group. Among the group found unfit to stand trial, 30 (31,9%), the reason was attributed to psychotic features during observation, n=20 (21,3%), intellectual deficit, n =9 (9,6%), and n=1(1.1%), a minor participant during the observation period whose age hindered the ability to understand and follow court proceedings.

5.6.2 Observation outcome in terms of criminal responsibility

The majority of the observed sexual offenders were found to be criminally responsible, 62 (66%); 32 (34%) were found to be not criminally responsible, 32 (34%).

Other local studies concur with this finding, Govender found that a significant number of n=75 (58, 59%) were found to be criminally responsible, while a minority of n=20 (15,63%) were declared not criminally responsible. Another study with similar findings by Stutte *et al*. reported 65% of alleged offenders under forensic observation for different criminal offences, including sexual offences, to be criminally responsible. In concurrence with the current study findings, Sokudela found that among sexual offenders with diagnoses of mental illness, 64% were criminally responsible, irrespective of the diagnosis type (Sokudela, 2016).

For all participants who were found criminally responsible, 62(66%), there was no impact of mental illness on their capacity to appreciate the wrongfulness of their actions and their ability to act in accordance with the appreciation during the time of committing the alleged sexual offence crime. Thirty-two (34%) participants were found not criminally responsible during observation due to the impact of mental illness on

their capacity to appreciate the wrongfulness of their action and on their ability to act in accordance with the appreciation.

5.6.3 Association between DSM-5 diagnosis and fitness to stand trial

All alleged sexual offenders with no diagnosis of mental conditions, together with those diagnosed with personality disorders, substance use disorder and mood disorders were found fit to stand trial. It is noteworthy that personality disorders do not impair cognitive ability to follow court proceedings (Govender, 2014). Substances, on the other hand, may impair judgment at the time of committing an offence, but in the long run when an individual not under the influence of any substance, the state of mind returns to normal functioning. Contrarily, other studies found mood disorders with other cognitive disorders like dementia to play a role in unfitness to stand trial (Govender, 2014).

Of the participants diagnosed with psychotic disorders, n=22, among the total sample of 94 participants, most, n=13 (59.10%), were unfit to stand trial compared to a minority, n=9 (40.90%), who were fit to stand trial. For the group diagnosed with Intellectual disability disorder, n=33, the majority were found fit to stand trial, 17(53.10%), while 15 (46,90%) were not fit to stand trial. Of those with a diagnosis of psychotic disorder due to another medical condition, n=8, the majority were fit to stand trial 6(75%) while a minority, n= 2 (25%), were unfit to stand trial.

5.6.4 Association between DSM-5 diagnosis and criminal responsibility

Notably, all alleged sexual offenders not diagnosed with any mental conditions; those diagnosed with personality disorders, substance use disorder, and mood disorders were found to be criminally responsible.

Most of the sample with a diagnosis in the psychotic disorders spectrum, n=22, were associated with being not criminally responsible, 14(63.60%), and 8 (36.40%) were criminally responsible. Among those diagnosed with intellectual disability disorder, n=32, the majority were found criminally responsible, 17(53.10%), as opposed to 15 (46,90%) who were found to be not criminally responsible. Among the group with psychotic disorder due to another medical condition diagnoses n=8, a predominance of 5 (62.50%) were criminally responsible versus 3 (37.50%) who were not criminally responsible. A local study by Govender supports that these psychotic disorders, IDD, and additionally dementia or cognitive impairment diagnosis are associated with no

criminal responsibility due to poor judgment, impulsivity and disinhibition to resist committing a sexual offence (Govender, 2014).

5.7 CONCLUSION

During the study period of this study, 94 individuals were referred by the court for forensic psychiatric observation. The main alleged criminal charges were rape, and the majority of the offenders were referred for assessment of both their fitness to stand trial and criminal responsibility. According to the results of this study, the majority of the alleged sexual offenders were fit to stand trial and criminally responsible, irrespective of any mental illness diagnosis during the observation.

Noteworthy is that a significant number of the participants were diagnosed with mental conditions. The most diagnosed conditions were intellectual disability disorder, psychotic disorders and substance related disorders. This was followed by mental illness due to another medical condition and personality disorders. These findings indicate that adequate mental health interventions must be directed at those patients with intellectual disability, substance use disorders and psychotic disorders. Adequate management, in terms of psychosexual education, care, treatment and rehabilitation, is recommended for these groups to reduce the relationship between mental illness and sexual offending. This is important as patients with intellectual disability disorder may pose a challenge to rehabilitation once they have been declared state patients due to their cognitive disabilities.

5.8 LIMITATIONS

The main limitation factor of this study is the small sample size. The total sample size of 94 participants is not adequate to generalise the conclusions reached about the sexual offender population in the Limpopo Province. One factor that limited the sample size was the fact the forensic observation process was interrupted due to a shortage of the panel required to conduct the evaluation, for a couple of months in 2017.

The second limitation was the fact that a sample comprising entirely of Black Africans in a multiracial country is not representative. The sample consisted of 93 males Black Africans and one female Black African. Although the geographical situation of the study site allowed for a majority of the participants to be of Black African origin, the racial homogeneity of the sample in a country with multiracial and diverse cultural practices is not well represented for generalisation of this study.

In a retrospective clinical record review study, missing information is often a limitation factor. The forensic psychiatric observation consists of a multidisciplinary team of medical officers, registrars, psychiatrists, psychologists, occupational therapists, social workers and nursing staff. However, the nature of this study depended on retrospective record-keeping from each member of the team involved with a particular case according to their clinical competency in terms of gathering information necessary to conclude the evaluation. At times, crucial information might be missing from clinical records, such as a history of child abuse and the type of child abuse. In these cases, the issues could not be consistently commented upon. These are some of the loopholes encountered in a retrospective record review studies which significantly affect generalisation of important factors among the sexual offender population.

Another limitation discovered during the study was missing of crucial information like the relationship between the victim and the perpetrator as well as the age of the victim. This information could help determine whether the vulnerabilities were associated with family members vs strangers or elderly vs young.

There is a backlog of alleged offenders, from courts locally and nationally, who require forensic psychiatric observation. The criteria for referral for psychiatric observation lies with the court as do the specific reasons or symptoms leading to the request for psychiatric evaluation. Noteworthy is that there are cases with previous histories of mental illness, index mental illness and no mental illness, even after psychiatric evaluation. However, it is a challenging exercise to determine such information as it depends on the relative escort and the alleged sexual offender's understanding of his or her mental health to evaluate the mental status at the time of committing the sexual offence and evaluate previous psychiatric services. Furthermore, sexual offenders who may have warranted referral for forensic observations may not have been referred for observation.

The psychiatrist’s duty in this regard is to give an expert opinion to the court; the court determines the final judgment in terms of guilty or not guilty of the sexual offence crime (Kaliski, 2006). Of the 94 alleged sexual offenders observed during the study period, irrespective of the outcome, it is possible for some to be declared not guilty of the

sexual offence crime, this in turn will reduce the number of sexual offenders and further limit the generalisability of this study.

5.9 RECOMMENDATIONS

The majority of the participants in this study were diagnosed with mental conditions with the three most common diagnoses being intellectual disability disorder, psychotic disorders, and substance-related disorders, followed by psychiatric disorders due to another medical condition and personality disorders. According to this result, the role of psychiatry in the population of sexual offenders referred by the court for forensic psychiatric observation is crucial. Moreover, it requires engaging in clinical care, treatment and rehabilitation to extend beyond offering an expert opinion to the courts (Sarkar, 2013; Harris, Fisher, Veysey, Ragusa and Lurigio, 2010; Romi, 2009).

The data emerging from this study illustrates that the evaluating psychiatrist could determine individual case formulation of sexual offenders during the observation period. This means that for every case, the psychiatrist can establish a problem list and recommend biopsychosocial management for an individual alleged sexual offender. The psychiatrist's recommendation for holistic management may form part of the recommendations in the report back to the court. This approach will contribute to the wellbeing of sexual offenders in general. In addition, those with mental illness will never be lost in the system while awaiting trial in custody or on bail as there will be a proper down referral to access psychiatric services. Furthermore, all prescribed medication for mental illness and hormonal control will be easily followed up through the down referral system from the forensic observation psychiatrists to prison mental health services and to community mental health services.

For those without mental illness but having other psychosocial factors which potentially contribute to sexual offending behaviour, the appropriate multidisciplinary team down referral at both prison and community level will contribute to the reduction of sexual re-offending. The involvement of a multidisciplinary team should include psychologists, occupational therapists, social workers and mental health nurses both in prison and at the community level, according to their roles in biopsychosocial management of mentally ill and non- mentally ill sexual offenders.

The justice system needs to develop a pre-evaluation system whenever the need to refer for forensic psychiatric evaluation arises in order to prioritise cases with acute

mental illness over stable mental health care users and non-mentally ill sexual offenders. The pre- forensic psychiatry observation could be conducted by prison or court mental health care practitioners, including a psychiatrist, medical officer and nurse. This practice would assist in reducing the court referral backlog and the resultant long untreated mental condition complications. Moreover, it would reduce referrals of offenders with no mental conditions. In the case of sexual offenders who do not qualify for forensic observation, the prison mental healthcare providers would determine the appropriate rehabilitation concerning psychosocial vulnerabilities contributing to sexual offending behavior.

Community mental health services play a major role with mentally ill sexual offenders released from prison, on bail, reclassified state patients returned to the community and mentally ill patients before offending. Adequate care, treatment and rehabilitation at this level are crucial in terms of preventing both sexual offending and re-offending. All sexual offenders should return to the community following the referral process with a specific type of clinical care and follow-up by the psychiatrist from the referring hospital or prison. In addition, sexual education at the community level should go hand-in-hand with psycho-education during follow-up of mental healthcare users with or without a history of sexual offence.

Another concern and alarming finding of this study is a large number of diagnosed mental illnesses, n=82(87.2), in a total sample of 94 alleged sexual offenders, with only n=17 (18.11%) with previous known diagnoses of mental illness. Interpretation of these findings might suggest that the majority of mentally ill sexual offenders were missed at a community level and only identified by the legal system post sexually offending. According to this notion, another recommendation is community education on mental health red flags so that patients with mental illnesses can be fast-tracked and treated adequately to avoid the susceptibility of mental illness to sexual offending.

The majority of the participants were diagnosed with Intellectual disability disorder. In addition, most of the participants had a low education level and were not married. Previous studies also found similar results and that sexual offending is associated with poor cognitive functioning, impulsivity and sexual disinhibition. Considering these factors, sexual education among individuals with mental retardation is recommended.

This needs to form part of special school programmes, sexual education during hospital or clinic follow-ups and psychoeducation of the caregivers.

Religion, moral values and culture may play an important role in terms of choosing right over wrong. In this study, most participants had no record of their religious standing, although a significant number claimed to be Christian. Further studies are required to clarify the role of Christianity, morality and culture in relation to sexual offence.

Implementation of these recommendations at psychiatric forensic hospitals, in the prison sector, at local hospitals and at community level (local clinics and family involvement) would contribute to the biopsychosocial management of mentally ill sexual offenders and long-term follow-ups of the individualised treatment plans for sexual offenders. In turn, this would reduce the impact of sexual offence crimes on society in general.

5.10 CONCLUDING REMARKS

In order to have a better understanding of the prevalence of sexual offending by mentally ill individuals, as well as the associated factors, this study should be replicated in other parts of this Province, like Hayani Hospital in the Vhembe District, as well as in other provinces in South Africa. According to the literature review, similar studies have been conducted in the Gauteng Province, at the Weskoppies and Sterkfontein Hospitals.

For future similar studies, the limitations identified above should be addressed so that the findings may be more generalisable.

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ANNEXURES

ANNEXURE A: DATA COLLECTION SHEET

RESEARCH TOPIC: **OUTCOMES OF FORENSIC PSYCHIATRIC OBSERVATION AMONG ALLEGED SEXUAL OFFENDERS REFERRED TO THABAMOOPO HOSPITAL, LIMPOPO**

PARTICIPANT ID NUMBER													

Section A: Socio-demographics							
Age		Years		Gender		Male	
						Female	
Race		African		Marital Status		Single	
		White				Married	
		Coloured				Divorced	
		Indian					
Employment Status		Employed		Level of education		None	
		Unemployed				Primary	
						Secondary	
Religion:						Tertiary	
History of substance abuse		Yes	No			Drop Out	

Types of Substances		History of childhood abuse					
Alcohol		Yes		No		Unknown	
Cannabis		Details:					
Nyaope							
Opioids							
Glue							
Nicotine							
Others							

Section B: Forensic History					
Criminal Charges		CPA referral Section		History of previous arrests	
Number	Nature	Section 77	Section 78	Yes	No

Section C: Past psychiatric history											
Yes		No		Unknown							
Diagnosis						Treatment					
Known		Unknown		Yes		No		Defaulted			
Final diagnosis after assessment (DSM-5 Criteria)											
None	Psychotic disorders	Mood disorder	Substance use disorder	Intellectual disability disorder	Psychotic disorders due to other medical conditions						
Neurocognitive disorders	Personality disorders	ADHD	Conduct disorder	Malingering	Other relevant conditions						
Section D: Observation outcome											
Fitness to stand trial						Criminal responsibility					
Fit to stand trial						Responsible					
Unfit to stand trial						Not responsible					
Reason:						Reason:					

ANNEXURE B: RESEARCH CLEARANCE CERTIFICATE

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email: anastasia.ngobe@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE

ETHICS CLEARANCE CERTIFICATE

MEETING: **05 November 2019**

PROJECT NUMBER: **TREC/476/2019: PG**

PROJECT:

Title:	Outcomes of Forensic Psychiatry Observation Among Alleged Sexual Offenders Referred to Thabamoopo Hospital, Limpopo
Researcher:	TA Ngwenya
Supervisor:	Dr VN Mzimba
Co-Supervisor/s:	Dr PJ Mokoena-Molepo
School:	Health Care Sciences
Degree:	Master of Medicine in Psychiatry

PP. Mzimba

PROF P MASOKO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

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

Note:

i) **This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.**

ii) **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.**

iii) **PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.**

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ANNEXURE C: DEPARTMENT APPROVAL TO CONDUCT RESEARCH

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

Department of Health

Ref : LP – 2019-12- 005
Enquires : Ms PF Mahlokwane
Tel : 015-293 6028
Email : Kurhula.Hlomane@dhsd.limpopo.gov.za

Ngwenya TA

PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

Outcomes of forensic Psychiatry observation among alleged sexual offenders referred to Thabamoopo hospital, Limpopo.

1. Permission to conduct research study as per your research proposal is hereby Granted.
2. Kindly note the following:
    a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
    b. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
    c. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
    d. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
    e. The approval is only valid for a 1-year period.
    f. If the proposal has been amended, a new approval should be sought from the Department of Health
    g. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated

Head of Department **Date** 10/02/2020

ANNEXURE D: LETTER TO CONDUCT THE STUDY AT THABAMOOPO HOSPITAL

Ngwenya TA

PO BOX 283

Thornhill Plaza

0882

27/11/2019

The Chief Executive Officer

Thabamoopo Hospital

Private Bag X37

Chuenespoort

0745

RE: REQUEST FOR PERMISSION TO CONDUCT A RESERCH AT THABAMOOPO HOSPITAL FORENSIC PSYCHIATRY UNIT.

Topic: Outcomes of forensic psychiatry observation among the alleged sexual offenders referred by court at Thabamoopo between the periods January 2015 to December 2018.

I hereby request permission to conduct the above-mentioned study at Thabamoopo Hospital.

The purpose of the study is to determine factors associated with sexual offending and impact of mental illness on fitness to stand trial during psychiatric observation.

The findings of this study anticipate on guiding psychiatry services on identifying risk factors associated with sexual offending behaviour. In turn this exploration will assist with implementing strategies to minimize sexual offence crimes in our society.

The study involves collecting data from clinical records of alleged offenders who were observed as per court order during the period January 2015 to December 2018.

Ethical clearance will be issued by the Turf Research Ethical Committee (TREC) (see attached document).

Permission to conduct the study granted by the Department of health provincial research committee (see attached document).

The office of the Chief Executive Officer is hereby requested to grant permission to collect data from clinical record keeping.

Regards

Ngwenya TA (Principal Researcher)/ ngwenyathembani@ymail.com.....

Permission to conduct a research at Thabamoopo Hospital is hereby Approved ~~/ Approved as Amended / Not Approved~~

Comments .....

Dr Mphahlele LM.....

Acting Chief Executive Officer

Thabamoopo Hospital

DATE....14/02/2020

ANNEXURE E: STATISTICIAN SUPPORT LETTER

University of Limpopo
Research Administration and Development Department
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3702, Fax: (015) 268 2306, Email:
Mmbengeni.netshidzivhani@ul.ac.za

03 May 2020

TO : **WHOM IT MAY CONCERN**

FROM : **MR MV NETSHIDZIVHANI**

RESEARCH STATISTICIAN: RESEARCH ADMINISTRATION AND DEVELOPMENT

SUBJECT: Letter of Confirmation

Dear Sir/ Madam

I hereby confirm that I have assisted Dr **Ngwenya Thembani Advocate (210313681)** with data analysis, who is trying to find "**Outcomes of forensic psychiatry observation among sexual offenders referred to Thabamoopo Hospital, Limpopo".**

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Based on the nature of her research design and the objectives, she was advised to use descriptive analysis and Chi-squared Test for association between DSM-5 diagnosis and fitness to stand trial and DSM-5 diagnosis and criminal responsibility.

Regards