An investigation into the relationship between depression and suicidal ideation among adult female offenders at a correctional facility in South Africa: The intervening roles of hopelessness and social support.

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COMPULSORY DECLARATION

I, Hloniphile A. Khuzwayo declare that, this thesis has never been submitted before in part or in its entirety for the accolade of any degree. Thus, it is the product of my original effort, and every significant piece of material, or work of other people used, has been acknowledged and cited in this document with proper citation and reference.

Signature: [redacted] **Date:** **05 August 2024**

DEDICATION

This thesis is a special dedication to mom Mrs Philda Boneni Ngidi, my daughter Noxolo Myeza, my husband Alfred Gcabashe and my brother Xolani Ngidi. Everyone but my daughter did and still do not understand what I was doing but the support I received is amazing, especially Mhlathuze. Patience, emotional, appraisal and instrumental support that he gave me through this journey. I also dedicate this dissertation to my whole family's love and support which kept me going when I felt overwhelmed. They always took care of all other things outside my studies. You showed me that coming from a rural community is not a disadvantage and it takes one's personality to achieve anything in this world. You taught me that 'we are not defined by where we are coming from but by who we are and what we are capable of in this world'. Ngithi ko Siyamini, oMhlathuze, nako Mlalazi kaNoxhaka, niyenzile indaba. Isandla sedlula ikhanda bantu bami. Kwande ukulekelelana.

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CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

The increased prevalence of mental health issues and suicidal behaviour among adult female offenders in correctional settings necessitate an investigation of these dynamics to inform effective interventions with relevant strategies. Depression, hopelessness and lack of social support among offenders is a critical worrying issue that leads to the most unnatural death in correctional centres. However, these symptoms especially depression and hopelessness remain undetected because of the nature of the environment (correctional service centres) that are overcrowded and do not provide space and lack capacity for such investigations. This study was descriptively, and explanatory designed to investigate the relationship between depression and suicidal ideation among adult female offenders in a selected correctional service centre in South Africa. It further assessed the intervening role of hopelessness and social support in this relationship. The interpersonal theory of suicide, hopelessness theory of depression and theory of social support provided the theoretical framework in this study.

The study was conducted with a sample of 155 adult female offenders (aged 19-75) who do not have known psychiatric diagnosis at the female correctional centre in Durban KwaZulu Natal. A proportional probability to size cluster random sampling was adopted and data were collected through a self-administered structured questionnaire. Data was analysed using IBM-SPSS 29. Various statistical analysis was used including descriptive analysis, inferential statistical analysis, multiple regression and Andrew Hayes mediation and moderation Process Macro analysis (Bolin & Hayes, 2013).

Descriptive analysis showed a high prevalence of depression (n=147, 94.8%) and n=8 (5.2%) with average depression symptoms. The prevalence of suicidal ideation is 28% (n=44) and 111 (72%) did not report any suicidal ideation symptoms. Further analysis found that the prevalence of hopelessness among female offenders was 60% (n=93) and 54.8% (n= 85) for participants who receive social support from either family, friends or significant other.

Multiple regression analysis found that depression significantly and positively predicts suicidal ideation (F (.154) = 30.477, p<.001); hopelessness as well significantly and positively predicts suicidal ideation (F(1.153) = 215.216, p<.001). The study hypothesised that there is an intervening role of hopelessness and social support in the relationship between depression and suicidal ideation. Hopelessness was found to have a significant mediation role in the relationship between depression and suicidal ideation. A significant regression equation was found (F(2,152)=-3.315, p<.001), with an R^2 of .585. The results show that the participants' predicted suicidal ideation is equal to -3.315- 1.248 (hopelessness) + (-.008) (depression). Social support was observed to significantly moderate the relationship between depression and suicidal ideation among adult female offenders (F(3,151) = 41.033, p<.001), with the R^2 of .342. This study promotes suicide prevention and alleviation through identifying key mediating and moderating factors that could be targeted into interventions in the correctional service environment. Results from this study highlight the need for criminal justice and correctional service centres to strengthen their screening, monitoring and evaluation process of mental health on entry, during and reintegration of offenders. This study recommends further research using qualitative approaches to explore the narratives of female offenders on their lived experiences and the extent to which correctional services available are accessible, responsive to female offenders needs and utilised by offenders as a means of mitigating depression and increasing support mechanisms.

CHAPTER 1

INTRODUCTION

Incarceration plays a critical role in curbing crime and insecurity around the world, and in correcting the deviant actions to those who have broken the law. Due to the approaches, models, environment, and strategies implemented to correct the wrongdoings within the correctional institutions, mental health issue is one of the concerns that emanate from incarceration. This is evident especially for women offenders whose roles and behaviour are culturally defined. Nseluke and Siziya (2011) raise that mental illness continues to be the worldwide problem primarily in correctional facilities and literature have presented the domination of mental illness among incarcerated people than general community. From an umbrella body of mental illnesses, depression is a common mental health concern that dominates in the correctional facilities. Kamoyo et al. (2015) state that incarceration experience is associated with depression which leads to relatively high rate of suicidal behaviour especially for female offenders (Habtamu & Desalegn, 2020). This chapter thus presents an overview on the problem of depression, suicidal ideation, hopelessness, and social support. It further provides the background and rationale of the problem under the study, the significance, aim and objectives and research questions to be studied. Finally, the definition of significant concepts and the thesis structure are provided.

1.1. Background and context of the study

Female incarceration has gradually increased, and a focus in studying female offender's mental health status has been noticed (Wright et al, 2012; Harner & Riley, 2013; Rose, Label & Blakey, 2016). The DCS Annual report (2021) indicates that women make up about 2.97 % (29,481 of 99,0215) of incarcerated persons in Africa and their specific needs are seldom, if at all, catered for. Ackermann (2015) mentions that female offenders are viewed as the most vulnerable group

that is susceptible to mental health disorders and suicidal behaviour compared to male offenders. This occurs at the time of their admission due to trauma as female offenders get separated from their children, families, and communities. This trauma is also an outcome of but not limited to past victimization, safety anxiety, the stigma and labelling associated with female incarceration, limited experience of contact with the authorities, or lack of education and economic status (Ackermann, 2015). The experience of women during entry into the correctional facility is likely to cause mental health problems such as depression that may lead to losing hope and thoughts of suicide.

Cabeldue, Blackburn and Mullings (2019) assert that females in general, and particularly female offenders when compared to male offenders, experience mental health issues at a higher. Equally, Bronson and Berzofsky (2017) state that female offenders have a "higher rate of mental health problems compared to their male counterparts with 73% and 55% respectively." Literature has further shown that women's rates of suicide are considerably higher in correctional centres, putting females to be prone on committing suicide compared to male inmates (Cheng & Gueta, 2017). Furthermore, the study reported that more than half of the women had an experience of either suicidality as a result of youthful ill-treatment, previous inception of substance misuse, and observable incidences of mental health issues in the family. This indicates that suicidal behaviour is influenced by several factors. A study by Baranyi et al. (2019) concurs that mental illnesses often continue to be undetected and not treated in correctional services. These authors further argue that offenders whose mental health needs remain unmet are at high risk of suicidality and reoffending after release (Naidoo and Mkize, 2012; Baranyi, et al., 2019). Hence, the researcher's interest in investigating the association between depression and suicidal ideation

among female offenders, as well as the intervening role of hopelessness and social support between these two phenomena in South Africa.

The rate of mental health disorders in correctional services has been limitedly reported, whilst unnatural deaths are reported in South Africa's correctional services. For example, the JICS (2016/2017) annual report showed that the Department of Correctional Services reported 52 deaths from unnatural causes. An increase of 82 unnatural deaths was reported in JICS 2017/2018 annual report, where suicides represented 27 (38%) of the correctional service offender population. Suicide appears to be the most dominant form of unnatural death in South African correctional centres, with most deaths resulting from suicide by hanging, 75% of suicides (21 inmates). Offenders utilised different items, but mostly cords created with bedding and clothing (JICS, 2018). The JICS report does not indicate or provide the statistics as per gender (male against female offenders). This leaves a grey area on the prevention intervention strategies to be put in place as they would not be gender specific.

Mandriaccha and Smith (2015) state that depression and hopelessness, are of the strongest predictors of suicide risk, and have predominantly been studied over prolonged periods of time with male offenders. Literature reveals that there are different common risk factors to mental illness that make things even worse once incarcerated. Overcrowding within the facility, childhood experience and adult intimate partner violence increase mental health problems during incarceration (Chen & Gueta, 2015; De Hart & Moran, 2015; King & Foley, 2015). Valverde (2016) extends that pathways to incarceration for women stem from gender-based violence that they experience when very young, chiefly from the male relative. Limited research on mental health (specifically depression) of incarcerated female offenders in South Africa has been conducted. Most mental health-related issues have been an ongoing discourse in South African

newspaper articles. This leaves a gap that needs to be filled by researchers within the field. For instance, Patrick (Timeslive, 2018) reported that mentally ill offenders are increasingly committing suicide; and suicides by mentally ill patients are on the rise within correctional centres. Furthermore, Makinana (2018) states that mental illness among female illness was extensive, the mental health services provided by the government were not relevant and thus not responding to the mental health care needs of female inmates.

Equally, DeHart et al. (2013) assert that incarceration increases vulnerability and mental health problems, and its prevalence exceeds that of general population. There is likelihood of women's mental health to decline in correctional facilities that are congested, where offenders are not suitably divided, and programmes do not address the specific needs of women (WHO, 2014). Hence, endorsing mental health and wellbeing should be at the centre of the correctional service's health care policy. Studies contend that because of being the minority, incarcerated females have been incorporated into the males group in terms of reform decisions (Kamoyo et al., 2015; Ackermann, 2015; Vetten, 2008).

Different authors agree that incarceration negatively affect the psychological and physical being on inmates, resulting to psychological decline (Tomar, 2013; Armiya'u, Obembe, Audu & Afolaranm, 2013). These effects lead to emotional withdrawal, depression, suicidal actions/thoughts, and increased level of hostility. Consequently, literature indicates that when entering correctional facilities, offenders are exposed to new culture, that differs from their own; and this culture leads to limited and even loss of interaction with family, significant others, and friends outside the correctional facilities (Mitchell, Pyrooz & Decker, 2020; Tomar, 2013; WHO, 2014).

The stresses of incarceration and societal disadvantage can exacerbate despair for offenders and societal disadvantage (Palmer & Connelly, 2005). Thus, depression has been observed as a serious hazardous factor for self-harm and some have identified hopelessness as an imposing predisposing variable for the community incarceration (Tomar, 2013; Armiya'u, et al, 2013). Globally, especially in low- and middle-income nations, high rates of mental disorder have been documented among corrections populations (Yi, Turney & Wildeman, 2017; Mundt, et al. 2013). This discovery has also revealed the high prevalence of mental illness on offenders when equated to the universal people in Chile with women having higher rates than their male counterparts. In addition, Fazel, et al. (2016) and Walmsley (2018) mention that the pervasiveness of investigated mental disorders on offenders was higher than the general population. Consequently, the national survey of inmates indicates that compared to year 2005, there is an increase of more than 705000 inmates reported to have mental health (Cabeldue, Blackburn & Mullings, 2019).

Furlong (2017) conducted research and found that over 90 offenders have mental sickness in different correctional centres in the Eastern Cape only. During an inspection, JICS (2018) discovered that 1200 offenders were identified to have one of the types of mental illness. In Durban correctional services, JICS reported 249 inmates who had mental illness. Accordingly, Naidoo and Mkize (2012) did research to discover the frequency of mental illness among incarcerated population in Durban, South Africa. The study indicated that there was a high pervasiveness of mental health illnesses among offenders. Due to prison overcrowding and mental health issues not being detected on time, some of these offenders were living in the same cells with offenders with no mental health issues, which is against the corrections Act 111 of

1998. There was a range of mental illnesses detected including depression and schizophrenia (JICS, 2018).

Female offenders often face unique challenges related to trauma, substance abuse, and other psychosocial factors, which can contribute to their increased susceptibility to suicidal ideation. The study aimed to describe the experiences of professionals about their mental health when working in correctional facilities as providers of care to suicidal offenders, findings depicted that there is a substantial gap between current policies that protect offenders' rights, and daily activities within correctional centres (Bantjes, Swartz & Niewoudt, 2017). Similarly, Naidoo and Mkize (2012) explored the challenges that are faced by professionals of health who work in South African correctional centres when trying to provide services to suicidal inmates. The professionals reported a high prevalence of mental disorders among offenders in this facility. And most of these offenders were untreated because their mental health disorder was not detected.

Dixey, Nyambe, Foster, Woodall, and Baybutt (2015) assert that female incarceration research has been lacking especially in the sub-Saharan African region; and practical research studies about this community and knowledge on gender specific encounters in correctional centres are almost not existing. According to Dixely et al. (2015) this was due to the smaller population which was considered as not requiring much research as male groups. Glaze and Gueta (2014) attest that there was absence of investigation into women's incarceration due to the assumption that development of women's correctional centres and experiences are similar to those of men. Hence, various authors argue that male research cannot be generalized to female offenders and females require gender specific needs that require consideration (Topp, Moonga, Mudenda, Luo, Kaingu, Chileshe, & Henostroza, 2016; Dixey et al., 2015).

Suicidal ideation

Suicide is a serious public health issue especially for offenders. Different studies have been conducted on offenders' population including both females and males. The condition of incarceration environment has many psychological effects that leads to negative outcomes. For instance, Zheng et al. (2021, p.3) conducted a study investigating

> "the prevalence of current suicidal ideation in a sample of Chinese offenders and further examined the mediating role of negative emotions and social support in the link between childhood trauma and suicidal ideation, and found that the prevalence of suicidal ideation among Chinese female offenders was 33.4%; social support and negative emotions acted as a chain mediator between childhood trauma and suicidal ideation".

Accordingly in a study conducted by Favril and Vander Laenen (2018) to examine the suicidal ideation among female inmates at the United States, it was discovered that approximately 20% of female incarcerated correctional centres reported experiencing suicidal ideation during their period in custody.

Suicidal efforts and suicidal thoughts are more common than completed suicide in correctional facilities. In a study conducted by Chen and Gueta (2017) to examine the association of socio-demographic, criminological and psychological with history of suicidal ideation and attempts among incarcerated women; 40% of incarcerated women indicated the experience of suicidal ideation in their lifetime while in correctional facilities. Similarly, Favril et al. (2017), and Amare et al. (2018) agree that suicide continues to be a critical public health concern, with negative effects on people across the lifespan regardless of their demographic background. Furthermore, Butler et al. (2018) assert that suicide remains the global worrying cause of death in custody. Amare et al. (2018) state that in Chicago female inmates' suicidal ideation in their

lifetime was 53%; and in the US correctional services, hopelessness, aggression, impulsivity, low reason for living, low social support and low self-esteem was found to be associated with suicidal ideation.

A study by Baranyi et al. (2019) concurs that in correctional facilities and because of its condition there is a challenge of diagnosing and treat mental health disorders among offenders. These authors further argue that offenders "with unmet mental health care needs are at high risk of suicide attempts, mortality, and recidivism after release" (Naidoo and Mkize, 2012; Baranyi, et al., 2019, p 7).

Suicide remains an alarming concern for public health, especially among offenders. Different studies have been conducted on offenders' population including both females and males. The condition of incarceration environment has many psychological effects that leads to negative outcomes. Accordingly in a study conducted by Favril and Vander Laenen (2018) to examine the suicidal ideation among female inmates in the United States, it was found that approximately 20% of female incarcerated correctional centres reported experiencing suicidal ideation during their period in custody. Additionally, it has been noticed that women's suicide rates are substantially higher in correctional institutions, putting female inmates at a higher risk of engaging in suicide behaviour compared to male inmates (Chen & Gueta, 2017). It is with reference to the above background that a study that aims to examine the correlates between depression and suicidal ideation among adult female offenders is significant.

1.2. **Statement of the research problem**

Females are prone and susceptible to mental health issue due to their societal determined vulnerability. Various authors similarly argue that the rate of mental health experiences is higher among female offenders than male offenders (Cabeldue, Blackburn & Mullings, 2019). Equally,

Bronson and Berzofsky (2017) extend that female offenders have a higher percentage of mental health problems compared to their male counterparts with 73% and 55% respectively. Due to their susceptibility, women suicide rates are substantially higher in correctional facilities, putting females at a prone position of being suicidal compared to male inmates (Cheng & Gueta, 2017).

Dixely, Nyambe, Foster, Woodall, and Baybutt (2015) assert that female incarceration research is lacking especially in the sub-Saharan African region as female offenders constitute the minority population which is considered as not necessitating much research as a male group. Consequently, Valverde (2016) asserted that there is an absence of investigation into women's imprisonment due to the assumption that the development of women's prison and experience is similar to those of men; and that the "evolution of the women's correctional system and experience of incarceration are irrelevant to the mainstream penology just because they shed a little light on the nature of prison system as a whole" (Topp, et al., 2016). In addition, Van Orden (2010) assert that,

> "suicidal behaviour is difficult to study as large samples are needed because the base rate of suicide attempts, and deaths are low in the general population. Second, individuals with suicidal behaviours are often excluded from clinical trials due to safety concerns on the part of researchers. Finally, individuals who die by suicide are not available for psychological assessments, thus limiting methods researchers can employ."

The problem that this study investigates is that offenders are prone to mental health issues and suicidality compared to non-incarcerated population, and female offenders are at greater risk compared to their male counterparts. The JICS (2017/2018) reported that suicide is the dominant cause of unnatural deaths among offenders with overcrowding regarded as one of the factors that negatively impact on offenders' mental health. Moreover, the World Health Organisation (2014) indicate that in "many countries 10-15% of prison population suffer from mental illness" (p.88)

where a 1/3 (one-third) of females including girls suffer from a major depression which put them at high risk of suicide, especially those incarceration. However, the prevalence and nature of mental health among female offenders remain unknown. Hence, the significance of this study is to investigate the correlation between depression as one aspect of mental health issues and suicidal ideation among adult female offenders and how hopelessness and social support intervene between these two variables. Findings emanating from this study will be useful to the Department of Health (mental health); Social workers and psychologists in the Department of Correctional Services in highlighting the need to develop gender-specific programs (women) and programs that address suicidal behaviour along with mental health issues (depression) within correctional centres. This contribution will be possible through the achievement of the main a

1.3. **Rationale of the study**

Limited research on the prevalence of depression and suicidal ideation among incarcerated female offenders in South Africa have been observed. Most mental health-related issues in correctional facilities have been an ongoing discourse in South African newspaper articles. This leaves a gap that needs to be filled by researchers within the field. For instance, Makinana (2018) states that mental illness among female offenders was extensive, but the services provided by the DCS were inadequate and unable to address the mental health care needs of female offenders.

A study conducted by Bantjes, Swartz and Niewoud (2017) to describe the experience of mental health professionals who are working in correctional centres with suicidal offenders, indicated that there is a noteworthy shortfall in current policies that care for offenders' human rights, and everyday activities taking place within correctional centres. As much as the current study's focus is on offenders and not practitioners, the reflections from practitioners is found relevant to engage the findings from their observations and analysis.

Dixey, Nyambe, Foster, Woodall, and Baybutt (2015) assert that female incarceration research has been lacking especially in the sub-Saharan African region. According to Dixey et al. (2015) analysis, this was due to the smaller population which was considered as not requiring much research as male group. Glaze and Kaeble (2014) assert that because of the minority of women population in correctional facilities, there was absence of investigation into women's incarceration due to the assumption that development of women's correctional centres and experience is the same as those of men; and the "evolution of the women's incarceration system and female experience of incarceration are irrelevant to the mainstream penology as they shed a little light on the nature of the system as a whole". However, various authors argue that male research cannot be generalised to female offenders and females require gender specific needs (Glaze & Kaeble, 2014; Dixey et al., 2015; Fazel et al., 2016).

It is for the background discussed above where a significant gap was identified between current literature and policies put in place to protect offenders' human rights, and everyday practices within correctional services. The prevalence of depression and suicidal ideation and its correlation among adult female offenders especially in South Africa is unknown. This provides an opportunity for this study to examine the relationship between depression and suicidal ideation among adult female offenders in South Africa. In addition, this study examined the intervening roles of hopelessness and social support in the relationship between depression and suicidal ideation. The findings emanating from this study will have a significant value in available literature especially in a South African context.

1.4. **Significance of the study**

There is limited research published on the mental health or the lack thereof of female offenders incarcerated in South Africa, to which this study will contribute. The results emanating from this

study will add knowledge on mental health condition in correctional centres within the field of Social Work. The findings will further support better outcomes for offenders especially females by providing social workers to initiate informed screening protocols with regards to suicidality and informed therapeutic interventions. Furthermore, results from this research will have an influence on mental health policies, by highlighting the need to improve and develop programmes that are gender-specific and address mental health issues especially in confined spaces like correctional service centres.

For DCS, the hope is that the department will be able to predict whether or not offenders are at risk of suicidality, and the results will contribute to redesigning of interventions and strengthen social support for women offenders. The department will further be able to determine the level of care that is appropriate to ensure the safety offender patients' and determine the relevant required plans and strategies. Finally, in a departure from the Millenium development goals of 2015, mental health and wellbeing are addressed under sustainable development goal 3 for sustainable human development plan by the year 2030. Mental health has become a strongly socially determined and this has significant influence on individuals especially females in general. Thus, this study will contribute on the achievement of SDG3 in a correctional service centre that is unique from the general population.

1.5. Aim and objectives of the study

1.5.1. Study's main aim

The main aim of this study is to investigate the relationship between depression and suicidal ideation among adult female offenders at a correctional facility in South Africa, and to examine the intervening roles of hopelessness and social support on the relationship between depression and suicidal ideation.

1.5.2. Study's Specific Objectives

The specific objectives of the study include to:

- Assess the prevalence and correlates of depression and suicidal ideation among adult female offenders.
- Examine associations between depression and suicidal ideation among adult female offenders.
- Examine the intervening roles of hopelessness and social support on the relationship between depression and suicidal ideation among adult female offenders.

1.5.3. Research questions:

This study aims to answer the following research questions:

- What are the prevalence and correlates of depression and suicidal ideation among adult female offenders?
- What are the associations between depression and suicidal ideation among adult female offenders?
- What intervening roles do hopelessness and social support play in the relationship between depression and suicidal ideation among adult female offenders?

1.6. **Definition of key concepts**

A *correctional facility* is “any place established under correctional service act 111 of 1998 as a place of reception, detention, confinement, training or treatment of persons liable to detention in custody or is on the way from one correctional centre to another”, (Bezuidenhout, 2011, p. 57).

A *correctional centre* refers to “any place established under the Correctional Services Act (25 of 2008) where persons are sent for the purpose of imprisonment or detention.” In this study this definition is used to refer to both sentences and awaiting remand detainees.

An *adult* is a person who has attained the age of majority. “The age of majority is the legally defined age at which a person is considered an adult, with all the attendant rights and responsibilities of adulthood. The age of majority is defined by state laws, which vary by state, but is 18 in most states” (James, 1960).

Adult: “The age of majority sets the age at which a child becomes a ‘major’ (this is a legal term for ‘adult’). A child who reaches the age of majority is able to conclude valid contracts without parental assistance (e.g. marriage and employment contracts)” (Children’s Act 38 of 2005, Section 17, RSA, 2008).

Crime is defined as “an action or omission which constitutes an offence and is punishable by law” (Department of Correctional services, 2005).

Criminal offence: “An act committed or omitted in violation of a law forbidding or commanding it for which an adult can be punished, upon conviction, by incarceration or other penalties or a corporation penalized.” It can further be regarded as any act that violates the criminal law (Mushanga, 2013).

Depression is “a brain disorder characterised by a persistently depressed mood or loss of interest in activities, causing significant impairment is daily life” (APA, 2013, DSM-IV).

Hopelessness has been defined as "the expectation that highly desirable outcomes will not occur and that one is powerless to change the situation" (Metalsky & Joiner, 1992, p667).

Incarceration is defined as an "imprisonment in a jail, prison, or penal institution for a period of time ranging from one day to a life term imprisonment. While imprisonment is a penal sanction in which an offender is held in prison for a lengthy period of time determined by the court in accordance with the provision of the national penal code" (Mushanga, 2013).

Mental health is a "syndrome characterised by a significant clinical disturbance in an individual's cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning" (Buckmon, 2015).

Mental illness is a "condition affecting the mental state of a person to such an extent that it causes significant distress to the person and/or it produces impairment in the person's ability to function socially, occupationally and in terms of their self-care" (National Department of Health, 2003; Mental health care Act, 17 of 2002, p.5).

Mentally ill inmate is a person as "defined in section 1 of the correctional service act in respect of whom an order has been issued in terms of section 52(3)(a) to enable the provision of care, treatment and rehabilitation services at a health establishment designated in terms of section 49" (Department of Correctional Service Act of 2005).

Offender: The term offender is defined interchangeably with an inmate in South Africa. *Offender/inmate* refers to "any person whether convicted or not, who is detained in custody in any correctional centre or remand detention facility or who is being transferred in custody or is on the way from one correctional centre to another" (Bezhuidenhout, 2011, p.57; s.1(c) of Correctional service act 25 of 2008).

Social support is conceptualised as a "social resource on which one can rely when dealing with life problems and stressors" (Kort-Butler, 2018). Cullen, Wrihgt and Chamlin (1999) describe social support as a "process of transmitting human, cultural, material, and social capital, whether between individuals or larger social units."

Suicide is defined as "doing something that results in one's death in the way that was planned, either from an intention of ending one's life or the intention to bring about some other state of affairs (such as relief from pain) that one thinks is certain or highly probably can be achieved by means of death" (Shneidman, 2004, p. 10, and Amare et al., 2018).

Suicidal ideation is defined as "if the respondent answers to the question that one has seriously thought about committing suicide" (Egziaber, Tadesse, Melaku, Amare and Shumel, 2018).

1.7. **Structure of the thesis**

This thesis is structured as follows:

Chapter 1: *Introduction:* provides a general introduction of this thesis. It further provides the background and context of the problem studies. The main research aim and objectives including research questions, rationale and significance of the study is provided. Finally, it provides the definitions of the key terms adopted in this thesis.

Chapter 2: *Literature review chapter* offers a critical overview of existing literature on the prevalence of depression and suicidal ideation among female offenders. It is outlined as follows: brief history of incarceration in South Africa; the effect of incarceration; prevalence of mental health disorders among female offenders, prevalence of suicidal ideation among offenders; the relationship between depression and suicidal ideation among incarcerated individuals. The pathways of women to criminality; the role of hopelessness and social support towards suicidal ideation is also reviewed. Finally, available policies that guide the functioning of correctional services and the issue of mental health issues in this environment in south Africa are reviewed.

Chapter 3: *The theoretical framework:* present the theories that couched this study: Interpersonal theory of suicide, Hopelessness theory of depression and social support theory. Depression, suicidal ideation, hopelessness, and social support are analysed in terms of these

theories. Theories are discussed individually on how they relate to each variable and extent of their relationship.

Chapter 4: *Research methodology:* discusses the steps and techniques involved in completing this research study. This chapter discusses the quantitative approach of the study; it describes the research paradigm, design, hypothesis, and hypothesized model of the variables; the measurement applicable to the study variables; data collection, management, and analysis; ethical considerations and limitations of the study are described.

Chapter 5: *Presentation of results* chapter describes the results of the statistical analysis performed in line with the specified objectives of the study and hypothesis outlined in the methodology chapter. The descriptive statistical results are appropriately presented, arranged, and clearly explained in accordance with the study objectives and the guidelines of IBM_SPSS.27.

Chapter 6: *Discussion chapter* presents the interpretation of the study results that were statistically analysed following IBM_SPSS.27 guidelines. The discussion is presented according to the objectives of the study.

Chapter 7: *Conclusion*: provides a detailed summary of results and make inferences by reporting whether the research objectives were either or not successfully achieved. This chapter closes with the implications for practice, research and policy redesigning and modification. Finally, recommendations are provided for future research.

CHAPTER 2:

LITERATURE REVIEW

Mental health is a global concern that has been studied intensely and it affects individuals from different socio-economic statuses and countries (Glaze & Kaeble, 2014; WHO, 2014). The former chapter provided a generic sense of how this research unfold. This study is intended to focus at, an investigation into the relationship between depression and suicidal ideation among adult female offenders at a correctional facility in South Africa: the intervening roles of hopelessness and social support. Literature shows that mental health problems affect offenders more than non-prison population (Duncan & Zwemstra, 2014); and female offenders are regarded as the most vulnerable group susceptible to mental health disorders and suicidal compared to male offenders (Ackermann, 2015).

The current chapter discusses a review of literature in mental health with a focus on depression as a subtype of mental health; and suicidal ideation and the relationship between these two variables in correctional service setting from the existing knowledge. It further reviews the role of hopelessness and social support towards suicidal ideation in relation to incarcerated offenders. In addition, the chapter reviews the welfare history of mental health disorders and policies in response to this problem in correctional facilities. Incarceration is briefly discussed in an era during and post-apartheid, criminal offences committed by female offenders, sentences awarded to female offenders, the effect of incarceration. Providing an overview of incarceration before reviewing women incarceration is of importance.

2.1.Social welfare history of incarceration in South Africa

This chapter provides a background on the historical information about and transformation of incarceration. Then it provides the effects thereof to sentenced women, and the emergence of mental health issues in this confined environment. The modes and purposes of incarceration have been reformed in South Africa pre-, during and post-apartheid. The history of incarceration takes us back to when this process was termed imprisonment. To make someone suffering after he or she has wronged the community was one of the imprisonment purposes and practices (Singh, 2005; Naidoo & Mkize, 2012; Tomar, 2013; Singh, 2016). In contrast to previous regime of imprisonment (punitive concept), "imprisonment is no longer intended as an acute form of corporal punishment but a model by which to work on a person's mind as well as his body through punishment, deterrence, and rehabilitation" (restorative justice) (Tomar, 2013; Singh, 2016). According to Luyt (2008) the transformation of imprisonment can be referred back in the 16th century as a means of stopping contacts and relationships between people who trouble their families and communities. One of the approaches that was adopted during imprisonment was retributive approach that is discussed below.

2.2. Overview of contemporary approaches of retribution

An approach of retributive focused on correcting the wrongdoings through punishment. According to Wenzel, Okimoto, Feather & Platow (2008) punishment can be understood as the "infliction of pain and it was seen as just response to the offender's crime, a way of educating the offender, protecting the society and a way to deter other potential offenders". Retributive justice infers that society can provide punishment whereas the wrongdoer should be punished (Wenze et al., 2008). This type of justice is about correcting the situation in a one-sided obligation of reprimand (Wenzel et al, 2008). The philosophy of retribution presumes that all society members

have an obligation to ensure that everyone is safe without disturbing others security. However, retributive model has been criticised for being inhumane and virtually refuting others' right to equality due to their status as offenders compared to communities outside correctional centres (Tomar, 2013).

On one hand Snyman (1989) argued that "using punishment to correct offending behaviour has not always yielded to positive change. With regards to retributive system human's behaviour is logical and therefore criminal offences should be viewed as a rational choice of act made by humans who deserve punishment" (Ibid). Whereas on the other, Tomar (2013) argues that the retributive system fails to see that individuals are sometimes unable to control of their actions and sometimes have no options which make them vulnerable to criminal acts. Within retributive approach correctional centres focus on punishment which make transformation through the implementation of rehabilitation services impossible. Singh (2016) further argues that retributive approach focuses on an individual's act of criminality but ignores the influences that social factors have to an offending behaviour.

The implementation of retributive approach in correctional facilities did not approve the employment of female warders due to the fear that they will be easily manipulated by male offenders, they are less aggressive and more likely to help inmates with their emotions. According to Hussemann and Page (2011) women officers when employed, were assigned to care for other women and minors with an intention of providing them with maternal care. Hussemann and Page (2011) add that correctional culture shapes officers' attitudes. Risk management in correctional facilities is emphasized, such as preventing escapes and violence. In order to ensure that offenders experience the anguish of incarceration due to emotional detachment, all officers regardless of their gender are socialised into becoming law enforcers.

Hence, correctional officers develop a work personality that is characterized by distrust, hypervigilance, isolation, and cynicism, thereby fuelling doubt and a loss of hope in rehabilitation (Tomar, 2013. In correctional settings, the implementation of rehabilitation process become challenged especially on gender-based programs. Another approach for imprisonment was utilitarian.

2.3.The utilitarian (Practical) approach

Utilitarian approach views punishment as violent but necessary to help offenders and society in preventing recurrence of crime. According to Orth (2003) with utilitarian approach, punishment serves the purpose of deterrence, incapacitation and rehabilitation. Incapacitation thus entails removing the criminal's ability to commit crime, whereas rehabilitation is a change on the inside that leads to the cessation of the desired behaviour (Orth, 2003) Accordingly, Mays and Winfree (2005) in some instances, when punishment is harsh, future crimes can be deterred. The main focus of deterrence is the future results rather than past offenses and the idea is that when done correctly, "punishment of an individual offender should deter the community from committing crime" (Mays & Winfree, 2005). In South Africa, incarceration has become the single correctional system that has undergone some transformation in the entire history of imprisonment. Tomar (2013) adds that the spiritual wellbeing and liberty of each offender is not only on the status of education, therapy and restoration they get inside, interactions with others while incarcerated is important.

2.3.1. Correctional service centres in South Africa

Imprisonment has been in place for a long time for the same purpose but in different forms, processes, and outcomes. From the primitive and classical way of imprisonment that was punitive and retributive pre-, during and post-colonial period, South Africa transformed its

imprisonment for restitution and correcting the wrongdoings through working with a lawbreaker for restoration rather than exclusively punishment (Singh, 2005; Naidoo & Mkize, 2012). After the acceptance of the Bill of rights and the constitution of South Africa no 103 of 1996, South Africa came to realise that criminals are also human beings who have rights. According to Pete (2008) "correctional centres were introduced after the beginning of colonialism to support the existence of a systematically organised prison system in Africa. In the pre-colonial period, penal systems in traditional societies were practiced through reimbursement to victims of injuries inflicted in all cases of crime, and the damage would be determined by the traditional leaders of the society."

Luyt (2008) mentions that transformations of imprisonment in South Africa started with becoming independent department and abolition of apartheid procedures through releasing political activist prisoners (Prison Amendment Act 92 of 1990). This Act put an end on the separation of inmates based on racial grounds as well. After that an amended Correctional Service and Supervision Matters Amendment Act 122 of 1991 (revised version of Prison Act 8 of 1959) was introduced for the implementation of community corrections that introduced the humane provision of treatment of sentenced and unsentenced offenders. The amended act reinstated the African principle of Ubuntu which symbolises a "collective worldview that sees relationships with others as far more important than the individual experience" (Hanks, 2008). Thus, Naidoo and Mkize (2012) ascertain that "the approach to handling crime involved a more collective and community inclusive approach than an individualistic approach that seeks to locate and pathologize the crime within an individual".

Correctional facilities were first established in the centre of Africa during the colonial era, and later extended throughout sub-Saharan Africa including South Africa. During apartheid

and colonial era in South Africa, the correctional facilities were ruled under the political regime where offenders were racially separated and segregated. According to Luyt and du Preez (2010) the setting of correctional facilities was that of military custom thus these institutions became the depositories of protesters against the government. Furthermore, it was during this era when there was a noticeable increase on the number of the detained females (Petè, 2008), which led to the implementation of punitive laws that encouraged ongoing overcrowding and harsh treatment of offenders including death penalty. The African offenders were seen as violent and evil, and their mistreatment was intended to maintain the supremacy and control by the Whites (Hanks, 2008). During apartheid, due to the interplay of gender, race and criminal status, African women faced the harshest situations throughout their incarceration. As a result, they were subjected to more maltreatment, which was marked by ongoing neglect and their status as invisible objects within the system (Petè, 2008).

2.4.Post-apartheid era in South Africa

Many African countries including South Africa were liberated during post-colonial era and South Africa became democratic. While this was intended to be a time of relief, the task of reforming apartheid era in correctional facilities remained enormous. Significant reforms were made to the DCS in South Africa following the emergence of democracy in 1994, since legality of the old penal system was questioned. These changes according to Luyt and du Preez (2010, p.10) included: “becoming an independent department (1990); releasing political inmates (since 1990)”; implementing community corrections (1991); ending inmate separation on racial grounds (1993); incorporating five correctional systems into one (1993); allowing inmates to vote (1994); adapting to Constitutional dictates (dictated by the 1993 and 1996 Constitutions); addressing representation (1995); demilitarisation (1996); implementing new legislation (1998,

2004 and 2008); introducing a judicial inspectorate (1998); opening super maximum correctional centres (1999); implementing unit management (2000 and various subsequent relaunches); and opening private correctional facilities (2001).

The White Paper on Corrections (2005) indicates that reformation of correctional facilities was collaboratively done at a worldwide phase with countries in African. However, the priority of attention is not given to incarcerated females (Sarkin, 2008). In South Africa imprisonment was decentralised where each region had its centre. Apartheid South Africa, Ciskei, Transkei, Venda and KwaZulu Natal were the five distinct correctional systems that were combined into one (1993) with the managerial level represented nationally (1995); and prisoners' right to vote was granted (Constitution of the Republic of South Africa, 106 of 1996) as well as adjusting to a system ruled by constitutional requirements which moved away with the militarization and inhumane treatment of offenders in correctional centres. The 1996 adoption of the Constitution gave South Africa's democratic government a general framework for governance.

Accordingly, Bezuidenhout (2011) and Singh (2016) assert that after the transformation of prisons to correctional services in South Africa between 1998 and 2010. The Mvelaphanda Strategic Plan for 2002-2005 was one of several initiatives used in South Africa to address the issue of overcrowding which was a global problem. The Department adopted Mvelaphanda in October 2001 with a goal that rehabilitation is at the core of all departmental correctional activities (Singh, 2005; Luyt, 2008). Reconstruction of cost-effective new generation prisons were instituted. These prisons would "offer the Department with the facility to effectively carry out the rehabilitation mandate within the principles of Unit Management" (Singh, 2005, p.35). "After two male prisons were closed in 2001 and 2002 no female offender ever had access to

private correctional facilities" that were rehabilitative (Luyt, 2008, p.303). With the transformation of imprisonment to restorative justice, the labelling of former offenders stays with the person, which is likely to cause mental health problem to incarcerated population.

The argument above reflects the historical background on the reformation and transformation of correctional centres institutions. The primary role of correctional centres was viewed as more investigative than helping. Henceforth, the understanding and frameworks dealing with of offenders' challenges were performed internally, while the reformation was facilitated by the community agencies who deal with community corrections after reintegration. The reformation of correctional service centres was created on idea that imprisonment was not compatible with restructuring.

2.5.Nature of correctional service centres in South Africa

The DCS is a vital institution to rehabilitate offenders and prepare them when they return into their communities. However, various studies including JICS report (2018) points to the lack of capacity and limited resources within DCS to serve the needs of more than 160000 offenders in South Africa. JICS reported that DCS' lack of technical capacity, staff and resources has led to failure to rehabilitate offenders and equip them with necessary skills to cope with the life outside the centre after release (JICS, 2018). This failure results to recidivism as many offenders fail to break out of the crime cycle.

Overpopulation is a foremost matter contained by South African Correctional Centres (SACCs). Different authors raise that, due to this congestion in several SACCs, most offenders spend almost the "whole day locked in a space smaller than a single mattress, and sometimes offenders are forced to share beds, share insufficient bathroom facilities, inadequate supplies of toilet paper and soap, poor ventilation, and inadequately prepared and inedible food" (Agboola,

2016; Benatar, 2014). Nieuwoudt and Bantjes (2019) contend that “living under such conditions is inhumane and has an adverse impact on offender’s physical and mental health. Hence, overcrowding in correctional facilities has been associated with elevated levels of psychological stress, psychiatric illness, interpersonal violence, physical assault, and sexual abuse, all of which raise the possibility of suicidal ideation and behaviour.

The inspection directed by the Judicial Prison Inspectorate (2021), shows that SACC were usually observed to still being untransformed to meet women’s needs. For example, Shishane (2023) and JICS (2021) similarly argue that “there are inadequate childcare services and, in some instances, female inmates with children were sharing the cells with other women” and different classifications are kept in the same centre. Even though the outline stipulates valued data regarding the women’s demographics in SACCs, it does not explore the lives of women in these institutions, particularly with regards to their “rehabilitative experiences” and mental health needs while incarcerated (JICS, 2021). Hence, more investigation is essential in providing significant intuition into the lives of incarcerated females in correctional institutions.

The DCS is further administers SACCs, and its practice is legally mandated by “Correctional Services Act (Act 111 of 1998), Criminal Procedure Act (Act 51 of 1977), Child Justice Act (Act 75 of 2008), Promotion of Administrative Justice Act (Act 3 of 2000), and Prevention and Combating of Torture of Persons Act (Act 13 of 2013).” The DCS is further guided by the 2005 White Paper on Corrections and the 2014 White Paper on Remand Detention Management in South Africa (South African Government, 2017). In agreement with regulations, the DCS has an obligation ‘to maintaining and promoting a just, peaceful and safe society by correcting offending behaviour in a safe, secure and humane environment’ (South African Government, 2017, para. 2). Moreover, the South African Constitution (RSA, Act 108 of 1996)

mandates the DCS "to protect the rights of all offenders, with regards to the right to human dignity, freedom and security of the person, safe accommodation, and adequate medical care". However, the DCS has failed to fulfil its statutory mandates and responsibilities, for an array of influences involving overcrowding, poor management, and limited resources (Muntingh, 2016). If the above is the case with South African correctional centres one would imagine the conditions of incarcerated women in such conditions characterised with overcrowding and lack of capacity and resources.

2.6.Magnitude of women incarceration

There has been a drastic increase rate of women incarceration in different correctional facilities including United States that has been occurring over the years (Palmer and Connelly, 2005; Liddell & Martinovic, 2013; Walmsley, 2018). Similarly, in the Sub-Saharan African institutions, women offenders have increased (Van Hout & Mhlanga-Gunda, 2018) nevertheless, women remain the minority in the male dominated correctional facilities. Globally, the Ministry of Justice (2022) reports that "the total prison population as of the 30th of June 2022 was 80 700. Of this population, females represented 4% and this proportion has remained relatively stable over the previous five years (ibid).

In June 2022 the incarcerated population was 2% lower compared to pre-pandemic (Covid_19) levels in June 2019." The report further indicates that as much as the broad proportion of offenders has not changed, "the number of female offenders decreased by 14% from 3800 to 3300 between June 2019 and June 2020" (Ministry of Justice, 2022, p 37). The same report indicates that United States of America alone houses above 2.1 million offenders that make USA to be the custody of highest prison population rate at the ratio of 655:100,000. Wamsley (2017) further states that South African countries have a ratio of 244:100000 and

western African countries confining 53:100,000. This makes Africa to have median rate of incarcerated population.

Steyn and Hall (2015) mention that around the world correctional centres hold approximately 10 million offenders. Of this population, female offenders represent approximately 2.9% of the total incarcerated population (Steyn & Hall, 2015; Fazel & Baillargeon, 2011). In South Africa, there have been an increase of incarcerated people for both men and women (Singh, 2016). Since the transformation of correctional institutions, the Department of Correctional Services have 239 centres where 8 accommodate exclusively female offenders (DCS, 2022). There has also been a noticeable fluctuation on incarceration rate in South Africa. This is evident in the DCS annual reports between years 2017 and 2022. The 2021/22 DCS annual report indicates that as of 31st March 2022 South Africa managed 243 correctional centres, which occupies 114913 offenders: with KwaZulu Natal having 41 active correctional centres accommodating 22024 offenders including 511 females (DCS, 2022).

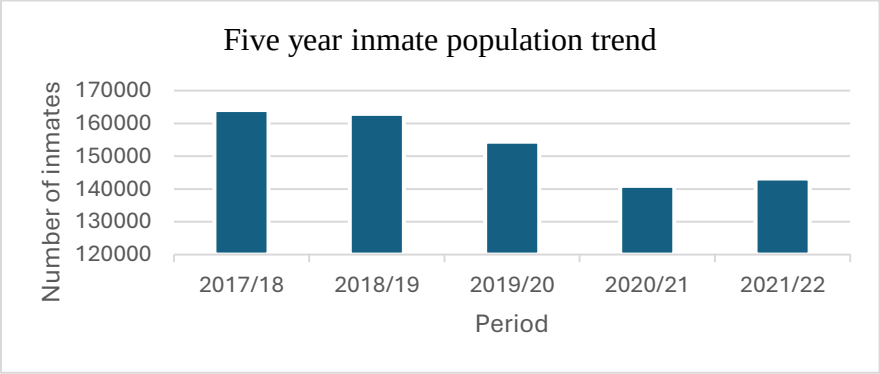
The report shows the decrease of inmates with 11226 from 154449 to 143223 (7.84%) between 2017 and 2020; and an increase by 2272 (1.59%) between 2020 and 2022 (DCS, 2022). With reference to DCS annual report 2021/22 the rate of incarceration is determined by the main three factors: “crime rates, number of sentences per number of crimes committed and expected time to serve in the centre” among inmates. Even if there is evidence on the increased number of women behind bars in the world, women offenders in South Africa constitute approximately 3% of the country’s incarcerated population (Parry, 2021; DCS, 2022).

In KZN female offenders represent 2.32 % of the incarcerated population (DCS, 2022). Even though the low number of women’s correctional centres has been observed in South Africa, the DCS acknowledges the significant barriers that women offenders face due to the design of

these facilities, which is tailored in line with men's needs and does not take into account the unique needs of women (DCS, 2020/2021). The DCS (2017/2018) annual report raise that given the constant emergence of new problems linked with the rapidly increasing number of women behind bars, this component cannot be disregarded any longer. For instance, incarceration has repercussions for women, their families and significant others that are influenced at a policy level.

The DCS annual report (2017/2018) reports that South African Correctional institutions had "an average inmate population of 160 583 with approved bed space of 118 723" at the end of the final year 2017/2018. This indicates that the Department is still faced with a challenge of overcrowding, and a situation is made worse by the fact that correctional centres are bound to accommodate both sentenced and un-sentenced inmates. Of the total incarcerated population, sentenced female offenders are 2956, with 1370 unsentenced female inmates. Specifically, KwaZulu Natal occupies 517 sentenced female offenders, and 136 awaiting trials (DCS, 2019) whereas in November 2019, 406 female offenders were housed at Durban Management Correctional Services which made this location suitable to conduct this study.

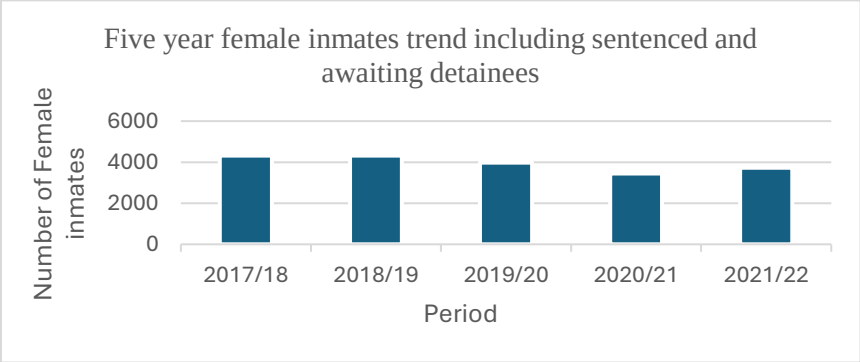
Figure 1: five-year trend of inmate population between 1 April 2017 and 31 March 2022 (DCS annual report, 2017-2022)



In the same period in South Africa, the annual reports presented the roller-coaster statistics on women incarceration. That is, in the 2017/18 annual report, female inmates were 4326, in

2020/21 report there was a decrease to 3453, and in 2021/22 report women inmates increased to 3724 (DCS, 2022). This fluctuation described and shown in graph 1 and graph 2 might have been caused by the emergence of Covid_19 that led to the world's shut down.

Figure 2: five-year trend of female inmate population between 1 April 2017 and 31 March 2022 (DCS annual report, 2017-2022)



2.7.Profile of female offenders in correctional institutions

Women are more likely to commit crimes due to the interconnection and variety of influences such as relational viciousness, institutional and organisational neglect due to their societal status, sexual exploration and trauma, inescapable poverty and sometimes influence of addiction. A study by Valverde (2016) examining the experiences of women within the context of gendered and racialised pathways to custody revealed that there was a prevalence of abuse experience prior incarceration (90%), "mental health problems exceeded 70% and less than 35% were receiving mental health care". Different authors agree that the majority of female offenders are predominantly unmarried, raise their children as single parents, have experienced abuse as girls and in adulthood from their intimate partners are highly represented in U.S. correctional facilities (Qhogwane, 2017; Valverde, 2016; Simpson, Yahner & Dugan, 2008). Crenshaw (2012), Lipsitz (2012) and the Sentencing Project (2013) indicate that the rise in the number of women serving longer sentences is a result of social shifts in sentencing and policy that coincide with the intensification of war on drugs.

In a study by Zheng et al (2021) it is argued that women with a background of abusive relationship with a violent partner end up being charged for offences amounting to assault, manslaughter, and reckless endangerment. On the same note, other authors expand that women who were driven out of or fled violent homes and ended up on streets, become engage in criminal and commercial sex work to satisfy their cravings, and frequently experience more than one arrest and convictions (Valverde, 2016; Cheng & Gueta, 2015; De Hart & Moran, 2015). Moreover, women get involved in drug addiction through their relationships with men or family members; and others committed "crime due to immediate economic circumstances or greed and desire for more money" (De Hart & Moran, 2015).

With the current study results, the hope is that programs that are gender specific will be developed to meet different individuals with different backgrounds, specifically women. In a similar study, Cheng and Gueta (2016) conducted qualitative research with "eleven Israeli female offenders incarcerated in the sole female maximum-security correctional centre". It was found that the participants came from the most economically deprived and underprivileged segments of the society, which is also where the majority of victims of multiple abuse and suffering originate.

A study conducted by Agboola (2014) with twenty female ex-prisoners in South Africa presents that there were more black African women compared to other race groups. The majority had children, married, separated, divorced, widowed and single. The minority of women had skilled employment during their time of arrest. For example, medical secretary, accountant, an information technology specialist at the bank and a bookkeeper. Others were self-employed and others were unemployed during the time of arrest. From the participants, there were both first time offenders and repeat offenders. Accordingly, a study conducted by Nuytiens and

Chrisyiaens (2016) indicate that female offenders are characterised by one of the three domains prior to incarceration, that is, personal, interpersonal or community level. The vulnerability of individuals was highlighted in three key areas: “low self-esteem and low self-worth, psychological problems and addictions.” Women’s precarious status in the community is a reflection of their social vulnerability. Equally, Hout and Mhlanga-Bello (2018) conducted a literature study on female offenders in Africa which show that the health condition of women is wanting. The results further revealed a state of overcrowding in correctional institutions with poor nutrition, lack of support for reproductive needs.

2.8.Criminal offences committed and sentences spent by female offenders

The majority of women offenders spend shorter periods of sentences compared to male offenders. For instance, the Ministry of Justice (2022, p. 38) reports that “female offenders served fewer months on average than male offenders for determinate sentences, with a mean time served of 17.6 months and 26.6 months respectively”. More women offenders are set free from correctional facilities when compared to those remaining behind bars. It is argued there is a likelihood that women convicted for violent crimes have committed those crimes against their male partners or someone close to them (UN, 2014; Spannagel, 2019). An exploratory study conducted by Collier and Friedman (2016) in New Zealand with 100 female offenders to explore characteristics of women incarcerated in New Zealand found that about 54% of respondents were being held due to allegations of violence.

Like international countries, in Africa, the likelihood of women to commit violent and serious crimes is limited when compared to males (Ackermann, 2015; Valverde, 2016). Hence, their sentences are dominated with shorter periods. For example, in “the African region, a significant number of female detainees in South Africa, Malawi and Zambia are held for murder

or violent crimes against their partners" (Spannagel, 2019). Alternatively, in countries like Kenya, Botswana and Zimbabwe females were often held for crimes that nonaggressive. In upper Africa, Agomoh (2015) raise that women are convicted for the crimes that they have not committed. For instance, in "Benin, Sierra Leone, Nigeria, the Democratic Republic of Congo (DRC) and Egypt, women are detained in place of their brothers, husbands, sons, or boyfriends who are crime suspects while in conservative religious countries like South Sudan, and women are commonly detained for crimes such as adultery" (Agomoh, 2015). Moreover, Ackermann (2015) adds that in other communities, females get arrested because of laws instead of laws that are official and codified (2008).

The UN (2014) add that female offenders receive convictions from a fine to life sentences. For instance, "by end of 2006, 2287 women imprisoned, 171 received a fine with imprisonment as an alternative since they were very poor to pay the fine; 70 served life sentences and another 454 women served sentences of longer than 10 years" (Luyt & Du Preez, 2013, p. 310). Hence, it is important to understand that experiences of women to incarceration are different from those of men (Artz & Rotmann, 2015).

The South African Police Service Report (2018, p. 118) indicates that "drug related crimes in north-west were committed by females in 442 reported cases". In the same report it was revealed that in

> "KwaZulu-Natal among the 2 954 arrested offenders 142 (4.8%) were females, while in the Northern Cape the gender of arrested suspects, as in the case of victims, reflected a slightly higher representation of females at 14,9% (46 suspects) and 85.1% (263) of males among a total of 309 arrested suspects. Information received from Gauteng and Mpumalanga, indicate that most of the offenders were known to their victims, whether as family members, boyfriends/girlfriends,

> acquaintances or only known by sight. Assault and attempted murder cases involved both males and females and dominated with victims being known to offenders" (SAPS, 2017/2018).

In line with research by Artz et al. (2012) showing that females that experience long term domestic abuse end up murdering or hire other to murder their partners on their behalf. Qhogwana (2017) found that the women end up murdering intimate partners after an extended experience of being victimised. Dastile (2014) and Qhogwana (2017) accordingly argue that "pathways to crime for women who commit murder (such as infant, child or spouses) is often described as a response to a juncture of various circumstances such as domestic violence, abuse and poverty and being overburdened with childcare without social and financial support from the partner." Parry (2020) found that the classification of offences committed by female offenders were "aggressive crimes (41%) and economic crimes (39%), followed by drug use (8%) and other (13%)" which entails sex work. These statistics indicate a distinction of female offenders from international and continental population where in South Africa, women offenders commit more antagonistic offences than crimes related to economic regardless of whether or not the country is also economically marginalised.

Since 2005, there has also been a noticeable rise in the length of sentences given to female offenders in South Africa, suggesting that the number of women incarcerated for more than seven years has increased (Sloth-Nielsen, 2005). Statistics from 2011 show that in line with global trends Spjeldnes, Jung and Yamatani (2014) noticed that women in South African correctional facilities commit more crimes and drug-related offences when compared with men. According to Aday, Krabill and Deaton-Owens (2014), women are receiving lengthier sentences, which leads to issues including deteriorating health, losing peers, and dread of losing their lives.

2.9.Triggering factors for females to commit crime

Research on early stages of offense to women's pathways, several key areas that have significant progress have emerged. There is limited understanding on women in crime, and it is indicated that there should be different motives amongst females and males on their unlawful conduct, and these variations would suggest that various regulations are needed to lessen the propensity to commit crimes (Campaniello, 2019). Chesney-Lind and Pasko (2013) indicate that more than one million women are under the surveillance of criminal justice and more than 200 000 are behind bars. Dastile (2014) contends that when women enter the correctional service facilities, they commit crime due to their problems that lead them to the criminal activity itself. The usage of alcohol and drugs, histories of sexual and physical abuse, and fractured homes may be examples of triggering factors for females to commit crime (Nuyties & Christiaens, 2016). These pathways have been evident in numerous studies conducted around the globe.

Prior to incarceration, women had background of victimisation and substance misuse (Collier & Friedman, 2016). In the same vein, Luyt (2013) found that females who are perpetrators of most hostile misconducts than economic in South Africa have a history of violence including domestic violence. A series of early qualitative studies "produced compelling biographical narratives of women offenders and identified many key psychosocial risks and needs characterizing women's pathways to crime" (Brennan et al, 2012). Nuytiens and Christiaens (2016) in their study with "41 female prisoners explored the life stories and pathways to crime and prison of female prisoners in Belgium. The study further explored how women experience and interpret their life history and their offences." It was found that financial need, addictions, and abusive intimate relationships were the main vulnerabilities that were salient to offending. These pathways appeared to be substantively different from those of male offenders.

A prevalent pattern of mental illness was connected to serious childhood abuse through the early victimisation route. Secondly, extreme marginalization identified a pattern of poverty "to the intersection of gender, race, and class among certain women offenders. Thirdly, a relational pathway was identified as a combination of dysfunctional intimate relationships over time" (Brennan et al., 2012; Simpson et al., 2008).

In another study in Pakistan, Khalid, and Khan (2013) with 114 women offenders examined the pathways of this population to crime. Authors found that activities of women offenders were significantly associated the poverty and lack of empowerment. In a similar study in Cambodia, Jeffries and Chuenurah (2019) explored "the circumstances and criminal justice experiences that propel women into prison. The results revealed four pathways to prison: criminogenic, romantic susceptibility, domestic violence, and self-indulgent pathways." De Hart et al., (2014) conducted mixed study methods to understand the pathways for incarcerated females with and without mental illness. Life history interviews with 115 women from five US correctional centres looked at the relationship between trauma exposure and mental health status and the onset of crime and delinquency.

Poverty has been regarded as another contributor to female criminality. Chioma (2014) conducted a study in Nigeria to explore the gender dimensions of poverty to unravel the extent to which it drives women to crime. Chioma (2014) reveals that if the incident of poverty between women is high, the incident of crime will be high as well as offences committed by women in Nigeria purposely promote economic opportunity or advance an individual's socio-economic status. Uzor (2016) conducted a study in Nigeria and reported that among awaiting trial in Abakaliki prison, females are accused of stealing cocoyam. Which confirms that female's criminality involves crimes that help to show the financial condition. Accordingly, Milloshi

(2015) observed the pathways to women criminality and found that prostitution has become an economic survival strategy to growing women who are poor. This is an indication that women make rational choices due to available options for their economic situations.

In Kenya correctional facilities, Wafula Yenjela (2015) in their study in Kenya agrees with Nuytiens and Christiaen's discussion of economic and social disadvantage of females as a contributor to offending behaviour. The study of four documentaries on women offenders in Kenya revealed that economic considerations and gender specific vulnerability of girls and women to exploitation, sexual abuse and violation are key components in the pathways taken by females to commit crimes (Yenjela, 2015). In a study to explore women's narratives on a journey into prison in Kenya, Jeffries et al (2019) found that the life stories of females in Kenya reflect those in other countries. Particularly, victimisation, dysfunctional families, sexually related relationships, low level of education, poverty and motherhood.

In a similar study in Botswana, Modie-Moroka (2003) conducted a mixed methods study with eighty women offenders in six correctional centres with offenders aging between 16 and 65 years of age. The study yielded similar results from Kenya where women came from dispossesses and marginalised, facing a number of social and economic challenges form their communities. These according to Parry (2018) placed women at risk of victimisation. Due to gendered power disparities, women must live a lifetime self-sacrifice and compromise, reflecting on their subordinate status and preparing them for a life that they can put their needs after the satisfaction of their family members (Parry, 2018).

Like other countries, research on the pathways to criminality and incarceration has been conducted and women in South Africa are no different from other women around the globe. A blind eye has been turned by scholars towards female offenders in South Africa due to their

minority population in correctional centres. However, the specific environment has its own specific factors that influence one's behaviour. In a study conducted by Agboola, Appiah and Linonge-Fontebo (2022) to qualitatively explore the pathways of women in South Africa into criminality, it was found that previous experience of abuse, marriage that is not functional, and monetary motivation were defined as pathways of women into crime and in custody. In a study by Dastile (2014) with an aim to investigate the women's routes to crime and incarceration to illuminate their lived social realities in correctional centres." It was qualitatively found that socio-cultural norms and acceptable way of living towards females in the society was replicated in correctional facilities.

Equally, in their 2017 study, Steyn and Booyens presented distinct paths taken by female offenders to reach crime court. For example, females who have a history of harm or being previously harmed during their youth are more prone to aggressive crimes like assault and attempted murder due to drug use, and psychological issues of being labelled as problematic children (Steyn & Booyens, 2017). Artz, Hoffman-Wander and Moult (2012) in their research to investigate women's triggering factors to criminal justice systems in the Western Cape correctional centre found that woman have a background of "powerlessness experienced gender-specific exploitation and economic vulnerability that constrained and catalysed their life decisions including crime." Accordingly, in the same context JICS (2021) survey "reported that most women were single in the correctional centre at that time, between the ages of 30 to 50 years". These findings are similar to Artz et al. (2012) who discovered that a most incarcerated women' status was unmarried, under 40 of age, and 75% were mothers.

The incarceration of women far from home posed a challenge of interaction and communication between the offender and family specifically children (Artz et al., 2012). Despite

minor differences in description, local research is consistent with global literature characterising an average female inmate as a "woman who is likely to have a history of physical and sexual abuse, who is a mother, usually the primary caregiver of young children, and whose involvement with crime is often due to poverty or substance abuse" (Ackermann, 2014, p.14). Females in some South African correctional centres were convicted for hostile criminalities (murder, assault, and culpable homicide), and then monetary offences (fraud/forgery, theft, and robbery) (Steyn & Booyens, 2017). Nevertheless, current sentencing laws still aligns with male-centric theories of criminal behaviour, disregarding the lives, characteristics and roles played by women in crime (Parry, 2018). Female offender's lack of self-control contributes to their co-dependency with men who are abusive also engaging in crime. Their emotions of inadequacy and insecurity make it more difficult for them to adjust to life in a penal facility (Parry, 2018). As a result, regarding female offenders' rehabilitation endeavours should be aligned with women's needs.

2.10. Effect of imprisonment on females

Incarceration declines offenders' physical, social, and psychological being. Qhogwana (2017) raise that human rights-centred policies have led to the reformation and removal of severe physical punishment that was previously applied in penal facilities, but the psychological punishment is still in place. Research has been conducted on the impact of incarceration including on women offenders. In Australia, Segrave, and Carlton (2010) conducted a qualitative research project with twenty-five former female offenders to understand the long-term impact of imprisonment. The study found that further research should "pay attention to women's experiences of trauma, marginalisation, and exclusion from the mainstream community" (Segrave & Carlton, 2010). As their study found that it is important to recognise the experiences that are sensitive and could not be quantifiable to portray and clarify as well as at the core

support post women incarceration. Steyn and Hall (2015) support with that the psychological anguish is caused by excessive levels of violence, unfair treatment of inmates, resource scarcity, and dissatisfaction among social groupings. Therefore, there are several risk factors associated with incarceration and the emerging of mental health deficiencies.

The primary effect of imprisonment are withdrawal, dehumanisation, and retreat which contribute the gendered discourse that exists in the correctional facilities. Armiya'u et al. (2013) assert that inmates are further denied freedom, autonomy, and contact with families while convicted and housed in a restricted environment. This can lead to disastrous outcomes and deteriorate offenders' physical, psychological and social wellbeings. The fundamental impact of incarceration includes deprivation and loss of liberty (Armiya'u et al., 2013; Agboola, 2022) that limit contact with relatives, family, and friends, then escalates boredom, isolation and emotional connection for inmates.

Incarceration further leads to lack of privacy and autonomy which can be psychologically damaging (De Veaux, 2013). According to Tomar (2013), Agboola (2014) and Qhogwana (2017) some services and goods are withheld from offenders since they have little or no inputs and control on the distribution of essentials such as food, medical attention, and clothing. Thus, inmates' mental health become disturbed as they try to adapt into the new environment. Offenders adapt to the life of being "powerless and dependent" emanating from shouting and sometimes even bodily mistreatment (Steyn & Hall, 2015; Tomar, 2013).

Offenders further develop anxiety and insecurity by realising that they are encircled with individuals that might be involved in aggressive crime, thus become a threat and danger towards them (De Veaux, 2013). Likewise, Agboola (2022) attest that offenders may try to be alert at all times, avoid situations or individuals who are assumed to be risky and illegally possess objects

that they might use if they may become victims or attacked. Artz et al. (2012) add that the criminal justice system is seen by females as a continuation and recurrence of violent home environment, where bullying and persistence, threats, and controlled behaviour is common. Tomar (2013) confirms that correctional facilities have the potential to cause harm than good, which means that some criminals may experience psychic difficulties for the first time or that the system may worsen the pre-existing issues. The psychological consequences of the custodial environment include phobias and trauma induced reactions among offenders.

Equally, Armour (2012) asserts that incarceration increases vulnerability and increases mental ill-health, and its prevalence far exceeds that of general population. Various authors have been conducted to understand the effect of incarceration on female offenders in different countries. Völlm and Dolan (2009) conducted research with "638 female offenders from two prisons in the North-West of England who had self-harmed or attempted suicide". Moreover, DeHart et al (2013) indicate that female offenders have significant high rate of committing violent offences and substance abuse at a younger age. The socio-demographic and psychopathological variables were regarded as interrelated. Parry (2021) attests that "the prevalent risk factor that precede female incarceration is mental illness, and a disproportionate number of women suffering from mental illness are housed in correctional facilities."

A study conducted by De Hart et al (2013) to explore a high number of females with significant trauma history of severe mental illnesses and substance misuse had overlapping and vulnerable pathways to crime. The study found that there were high rates of mental disorders among the participants. Accordingly, Collier and Friedman (2016) in their study to explore the impact of incarceration among female offenders in New Zealand and revealed that 90% of women with the record of psychosis and had been admitted in a psychiatric hospital. The

psychological consequences of correctional facilities are frequently produces in a way that is counterproductive to the objectives of rehabilitation and reoffending reduction. Rather, it has a detrimental effect on mental health and frequency causes anxiety and depression symptoms (Steyn and Hall, 2015).

Overcrowding is another r contributing factor to mental health problems and various literature has shown it. For example, “overcrowding leads to absence of rehabilitation programmes, and extremely limited and often non-existent recreational or work opportunities which contributes to feelings of boredom, hopelessness, and being trapped, all of which are associated with increased risk of suicidality” (Benatar, 2014; Fazel & Baillargeon, 2011). Muntingh (2017) lists several factors that contribute to overcrowding in South African Correctional Centres: “increases in lengths of sentences being handed down; changes in the offence profile of prison populations; changes in legislation which have extended the sentencing jurisdiction of magistrate, district, and regional courts; and the introduction of mandatory minimum sentences.”

The World Health Organisation (2014) indicates that when correctional centres are overcrowded, offenders are not appropriately segregated, and attempts for rehabilitation are not existing or insufficient to meet the unique requirements of females. Therefore, the primary goal of the correctional services health care policy must be to promote mental health and wellness. According to Ackermann (2015) raise that reform decisions for incarcerated women population have been incorporated into the male population. “Women only make up about 2.97 % (29,481 of 99,0215) incarcerated persons in Africa” and their specific needs are seldom catered for (DCS, 2021). In addition, women are helpless during their entrance in the correctional centre after being charged by court of law as a result of shock of parting from relatives, significant others and

communities, and including previous ill-treatment, fears for their safety, the labelling and discrimination connected with their confinement, minimal experience of contact with state authorities, or semi-literate and economic status, among others (Mitchell, Pyrooz & Decker, 2020; Ackermann, 2015; WHO, 2014; Tomar, 2013). The experience of women during entry into the correctional facility is likely to cause mental health problems such as depression that may lead to losing hope and suicide ideation and behaviour.

2.11. Prevalence of mental illness among female offenders

Mental illness among offenders has been consistently reported to be higher compared to general population. Steyn and Hall (2015) raise that it is widely believed that being incarcerated is an extremely stressful experience that negatively impact offenders' wellbeing. Alemayehu et al. (2019) add that the number of incarcerated is quickly rising worldwide and one in nine of them develop mental illness linked with depression. Bronson and Berzofsky (2017) assert that an "alarming 65.8% of incarcerated women have been diagnosed with mental disorder, ranging from adjustment disorder and sleep disorders to mood disorders and psychotic disorders." Casey et al. (2020) supports these rates by indicating that serious mental illnesses especially "mood disorders and psychotic disorders may be as high as 50%" of the total offender population. Casey et al. (2020) further indicate that mental health disorders are the results of victimisation and substance use which serves as a coping mechanism for victims.

Equally, Lynch et al. (2014) conducted a multisite study to answer three questions on mental illness among female offenders in USA. Firstly, they wanted answers on lifetime prevalence of serious mental illness of incarcerated women. Secondly, they wanted to investigate the "level of impairment's association with their serious mental illness". Finally, Lynch et al. (2014) investigated the "proportion of incarcerated women with serious mental illness" who

were on substance use. The results indicated that 75% of participants had serious mental illness. The study suggests that the prevalence of serious mental illness requires a complete examination of mental health at the time of their admission into criminal justice system and alternative programs that will address the complexity of female treatment and needs. While depression is a mental health issue, it has received little attention especially in correctional facilities not to mention among female offenders whose existence goes unnoticed.

2.12. Depression among female offenders

The most prevalent mental illness among prisoners, with substantially higher extent than in general community is depression. There is no universally agreed upon definition of depression. Mandriaccha and Smith (2015) state that some authors argue that "depression is primarily a psychogenic disorder; others maintain that it is caused by organic factors." According to the DSM-IV (APA, 2013) depression (also known as Major Depressive Disorder) is characterised by "the presence of sadness, emptiness, or irritable mood accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function. Depression is used to designate a complex pattern of deviation of feelings, cognition, and behaviour that is not represented as a discrete psychiatric disorder". A cross-sectional study conducted by Shrestha et al. (2017) with 434 inmates in Nepal to predict the magnitude of depression and identify factors associated with it, found that the "prevalence of depression among inmates was 35.3% and 2.3% reported suicidal ideation" among inmates. Steyn and Hall (2015) add that in South Africa, being a female and ranging between the ages 35-49 years in correctional facilities is connected with increased seriousness of mental ailments. Moreover, the prevalence of anxiety and depression in women is twice that of men.

Cabeldue et al (2019) add that females female offenders experience mental health problems more than male offenders. This is accompanied by the history of childhood victimisation, abuse and excessive engagement in substance use. Johnson and Zlotnick (2012) assert that "major depressive disorder (MDD) is the most common severe mental illness in correctional settings." In their study aiming to determine the "treatment for major depression among women prisoners with substance use disorder," it was revealed that "40% of inmates with MDD have attempted suicide, including anti-social personality disorder and complex social problems" (Johnson & Zlotnick, 2012, p. 1177).

Like male offenders, with poor educational attainment and high unemployment rate, female offenders make up a portion of the most economically and socially disadvantaged people in the society (Armour, 2012). This drawback from female offenders is often associated with distressing practises that include but not limited to "emotional, physical, and sexual abuse as well as subsequent domestic violence." Females who have bad experience (sexual, physical, emotional, and psychological abuse) during their childhood are likely to commit crime which they directly blame for their offending; and female offenders' experience is more likely to be dominated with sexual and physical abuse compared to male offenders (Wolf, Silvia, Knight, & Javdani 2007). In UK, a study conducted by Tyler et al. (2019) to measure the prevalence and comorbidity of mental health needs for both female and male offenders, found that the majority of participants reported to have consulted the mental health services and mental health disorders were detected across different types. Finally, gender differences were noted where women significantly reported high levels of mental health need compared to male offenders.

Equally, in a cross-sectional study conducted by Girma et al. (2022) to "assess the prevalence of depression and associated factors among prisoners in Mizan Institute, Ethiopia.

The study revealed that the prevalence of depression among the female offenders was 29.9%." These results were associated with the physical fitness of an offenders which indicated that offenders that were physical active had less probabilities of despair related to non-active offenders. Thus, undernourished offenders had two times higher odds of depression compared to normal participants. In a similar study with 402 inmates in Ethiopia, Alemayehu et al. (2019) found that the prevalence of depression was 45.5% and those with poor health, long sentences and concerns about disadvantaged children. Thus, there is a critical requirement of threatening mental health services in correctional centres.

Kamoyo (2018) "examined the effects of imprisonment on self-esteem among 291 female inmates" and 4 staff members in selected correctional centre in Kenya. This research discovered a strong correlation between inmates' self-confidence and their incarceration. According to Kamoyo (2018), it was found that the majority of women incarcerated had low to moderate levels of self-efficacy which made them feel more unworthy of other people than they had before being locked up. These findings are consistent with a study that was completed by Bagdanic (2013) who "found that many female offenders in Queensland prison experienced a sense of helplessness every time they are strip-searched and when they resist their clothes are forcibly removed." Thus, women could view strip-searches as a violation of their body, extremely humiliating, loss of self-confidence. Research shows that women with poor self-efficacy find it harder to cope and are more likely to engage in self-destructive behaviours including cutting themselves with sharp objects. It is noted that poor self-efficacy minimises woman's capacity for coping and heightens, increases the self-destructive behaviours such as cutting themselves with any sharp objects (Kamoyo, 2018).

JICS (2018) reported that overcrowding in South Africa's correctional service centres is the root cause of mental health issues among offenders. Due to overcrowding in South African correctional centres (Commission of Gender Equality, 2018) and mental health issues not being detected on time, some of these offenders were sharing the same cells with offender without mental health issues, which is in contradiction of the corrections Act 111 of 1998. In Durban, a "total of 249 mentally ill inmates were found during inspections" (JICS, 2018). There was a range of mental illnesses detected including depression and schizophrenia (JICS, 2018). The results in this report does not provide the statistics as per gender.

Several researchers have conducted studies to understand the rate of mental health issues amidst South African female offenders Steyn and Hall (2015) conducted a quantitative study with "64 female offenders at a correctional centre in Gauteng to determine the levels of depression, anxiety and stress experienced by imprisoned female offenders. In the study, most participants reported normal to moderate levels of depression (69.8%), anxiety (68.3%) and stress (74.2%)." Tomar (2013) asserts that prison has detrimental psychological and physical impacts on prisoners that result in psychological decline. These might involve, emotional disengagement, melancholy, suicidal thoughts or acts, and an increase in animosity. Diagnostic and Statistical manual of mental disorders (DSM-V, 2013) indicates that males have a 5-12% lifetime chance of developing a serious depressive disorder, whereas females have a 10-25% chance. Significant depression affects 2-5% of men and 5-9% of women at any given moment (Beck & Alford, 2009).

A study by Naidoo and Mkize (2012) to determine "the prevalence of serious mental disorders in a prison population in Durban, South Africa, indicated that there was a high prevalence of mental disorders among prisoners." Durban correctional centre is one of the largest

in the Southern hemisphere. Due to undetected mental health issues among offenders, they were thus untreated. This is more so problematic as mental health issues and particularly depression has been postulated to have an effect on suicidality. In a similar location, Naidoo, Subramaney, Paruk and Ferreira (2022) carried out a study to determine the prevalence of HIV, mental illness, and borderline anti-social personality disorders among Durban's prison female population. According to the findings, "the subsequent lifetime prevalence rates were that: depressive disorder 70.6%, alcohol use disorder 48.4%, post traumatic disorder 46.8%, borderline personality disorder 33.3%, substance use disorder 9.5%, a total of 39% of participants admitted to past suicide attempts; while 64.3% reported past suicide ideation" (Naidoo et al., 2022).

Studies further concur that "mental health disorders often remain undiagnosed and untreated in correctional" services (Fazel et al., 2016; Baranyi et al., 2019). These authors further argue that offenders whose demands are unmet are at higher risk of suicide attempts, death and recidivism post incarceration. Correspondingly, Furlong (2017) points out that just in the Eastern Cape alone, more than ninety (90) offenders suffer from at correctional facilities. According to Steyn and Hall (2015) "the first study to determine the prevalence of mental disorders in South African correctional centres was conducted by Naidoo and Mkize in 2010 in Durban." A study by Naidoo and Mkize (2012) yielded the results that had no difference from international research as alarmingly "large number of offenders with psychosis or depression were not treated." In their study, anxiety and depression were among the most common conditions displayed by the majority of offenders. Recently in a study by Shishane (2020) aimed to "quantitatively examine the relationship between mental health and recidivism among incarcerated youth offenders in South Africa and the role of substance use." It was revealed that

279 (99.6%) offenders were symptomatic of depression which indicates an extreme mental health predicament amongst offenders.

Steyn and Hall (2015) conducted research to "determine the levels of depression, anxiety, and stress experienced by imprisoned female offenders through a survey from 64 incarcerated female offenders at a correctional centre in Gauteng." The study revealed that the majority of female offenders "presented normal to moderate levels of depression (69.8), anxiety (68.3%) and stress (74.2%)." The study additionally showed that there are maximum stages of hope, sense and motive among female offenders implying that they relatively cope well with stressors associated with incarceration (Steyn & Hall, 2015). Despite these positive remarks, the prevalence of depression among female offenders revealed to be at extreme levels including stress, anxiety and depression.

Equally, in the Free State province, Modupi, Masotho and Le Roux (2020) conducted research with offenders to determine the "prevalence of mental disorders" at the Bizzah health facilities in Kroonstad correctional services. The results showed a high prevalence of mental disorders in correctional centres which remains unnoticed and undealt with, where competency to stand before the trial and responsibility to criminal act is not correctly practical.

Some means have been done to respond to the mental health issues in correctional facilities especially in South Africa, though with challenges. A Commission of Gender Equality (2021) reports that staff shortages and capacity limitation at the correctional centres often results in poor healthcare service provision during lockup periods when sick inmates are left on their own including mentally ill and suicidal inmates. For the commission's study, inmates indicated that there is lack of adequate capacity to provide healthcare services for inmates at all times,

hence there is reliance on inmates to keep an eye on each other (Commission of Gender Equality, 2021).

2.13. Mental health and suicide

Research indicates that there is a relationship between mental health and suicidal behaviour especially among incarcerated populations whose life is restricted and determined by laws and security officials in correctional facilities. Baranyi, et al. (2019) state that substance use disorders are common among offenders. The authors further assert that offenders with untreated mental health issues are at high risk of suicide attempts, death, and re-arrest. Dye and Aday (2013) state that in the US, 6% of inmate deaths are attributed to suicide which is said to be at the fore of unnatural death causes, and the rate typically exceeds those of general US population. Various authors indicate that suicidal attempts and suicidal ideation are more common than completed suicide in prison with a ratio of 1:22 inmates (Dye and Aday, 2013; Charles, Abram, Mcclelland & Teplin, 2003).

Similarly, according to Favril, Laenen, Vanderviver and Audenaert (2017) and Egziabher, Tadesse, Melaku, Amare, and Shumet (2018) suicide is still a serious public health issue that affects people of all ages and economic backgrounds. Furthermore, suicide continues to be the primary cause of death in custodial settings worldwide (Butler, Young, Kinner, & Borschmann, 2018). Egziabher et al. (2018) state that in their lifetime, female inmates' suicidal ideation in Chicago was at 53%; and in the US correctional services, "hopelessness, aggression, impulsivity, low reason for living, low social support and low self-esteem was found to be associated with suicidal ideation."

Cheng and Gueta (2017) assert that women suicide rate is substantially higher in prison, putting females at a higher risk of committing suicide compared to male inmates. The findings

showed that female convicts had greater suicide death rates than both male offenders and general community (Cheng & Gueta, 2017). Furthermore, it was reported that more than half of the women had a past of suicidal behaviour as a result of childhood trauma, early engagement on substance abuse, and high prevalence of psychological problems from the family. This indicates that suicidal behaviour is influenced by several factors.

2.14. Suicidal ideation among female offenders

Suicide represents a major public health problem worldwide and is regarded as the core cause of unnatural death among inmates in correctional facilities (Nieuwoudt & Bantjes, 2019). Accordingly, Fazel, Ramesh and Hawton (2017) and Favril and Laenen (2019) add that suicide is world's most common cause of death in custodial settings, with significantly higher rates among offenders than among non-offenders. Wang (2017) documented 61 cases of controversial death incarcerated population between 2006 and 2013 in China. Favril and Laenen (2019) argue that "due to their complex mental health needs, female intakes comprise particularly vulnerable group at an elevated rate." According to Zheng et al. (2021) Chinese female offenders are prone to experiencing suicidal behaviour when related to male offenders. In a study conducted by Favril and Laenen (2019) with an aim "to investigate the correlates of suicidal ideation among 123 women incarcerated in Flanders, Belgium. It was found that women with recent suicidal ideation while incarcerated are significantly more likely than their non-suicidal peers to report a lifetime history of non-suicidal self-injury (7.36), in-prison drug use (4.72), and severe psychological distress (3.14)." the results emphasise how crucial it is to offer sufficient mental health treatments to inmates in order to address special needs and vulnerabilities of women and as a result, lower probability of suicide.

Suicide has been a visible but ignored behaviour among offenders. Offenders' suicide in South Africa has been reported in annual reports and the statistics keep increasing each year. Patry and Magaletta (2015) assert that "the detection of suicidal ideation and prevention of inmate suicide was an enduring challenge for criminal justice systems and professionals. Inmate suicide rates were larger than that of the general population"; and instruments that can reliably identify inmates who pose risk because they have suicidal thoughts have been desperately needed. In their study, Patry & Magaletta (2015) have indicated that female inmates with 55 years of age and older, as well as young offenders, exhibit greater prevalence of several disorders compared to their male counterparts. Thus, Fazel & Baillargeon, (2016) propose that the more research should be done on the benefits of programmes aimed at improving the health of inmates by lowering the incidence of infectious and chronic illnesses, suicide, numerous causes of early death, violence and breaking the cycle of reoffending.

Women seem to have higher rates of most psychiatric disorders than men. By comparison the "general population of similar ages, the highest proportionate risks are estimated to be for substance misuse and dependence, antisocial personality disorder, and psychosis" (Fazel & Baillargeon, 2016, p. 957). Elevated magnitude of suicide within correctional service centres and escalated death from different effects upon release have been documented in most nations. For instance, Nieuwoudt and Bantjes (2019) conducted a study with correctional facilities' health professionals to explore their experiences. The aim of the study was to comprehend the health authorities' perceptions on the factors contributing to "suicidal behaviour among offenders" and explore suggestion on deterrence majors. The study found that suicidal prevention is hampered by structural issues in correctional facilities, which also make it more difficult for medical personnel to effectively treat offenders (Nieuwoudt & Bantjes, 2019).

2.15. Associations between depression and suicidal ideation among offenders

There exists a well-established empirical correlation between mental health issues and incarceration. Numerous investigations have verified the elevated frequency of mental health concerns among juvenile offenders. For instance, a study by Pat et al. (2021) "to assess the level of mental health problems and suicidal expression and determine the associated risk factors among young prisoners in Cambodia", found that short-term incarceration for younger ages were linked to mental health issues. Favril et al. (2020) conducted research to "examine how different mental disorders relate to distinct stages of the suicidal process that is the transition from ideation to action." The results revealed that "34% of offenders reported a lifetime history of suicidal ideation, and 55% reported attempted suicide at some point." Alternatively, the were no suicidal outcomes from those who reported an absence of mental disorders.

Due to the various duties and obligations they bear while overcoming trauma and victimisation in a society that provides little help, the profile of women who are incarcerated is gendered (Segrave & Carlton, 2010). A study aimed at determining the magnitude and correlates of sociodemographic with mental health disorder among offenders in Lusaka Central correctional facilities found that 63,1% of inmates were mentally ill; and marital status was associated with mental illness (Nseluke & Siziya, 2011). Due to these findings, various researchers conclude that incarceration leads to both negative physical and psychological effects and psychiatric prevalence has elevated on inmates leading to psychological decline; and these effects included but not limited to "emotional withdrawal, depression, suicidal thoughts, or actions and increasing levels of hostility" (Tomar, 2013; Sokero, Merlatin, Rytsala, 2003).

2.16. Hopelessness and suicidal ideation among offenders

Mental health disorders have been proven to be the main risk factors that lead to offenders to feel hopeless and then engage to suicidal behaviours. There is paucity of studies that explore the effect of hopelessness and the role it plays on suicidal ideation among female offenders. Hopelessness has been examined in different fields like health, criminal justice, and psychology but with most focus on male and youth offenders. Empirical evidence supporting a possible relationship between hopelessness and suicidal ideation among female offenders including the role it plays between depression and suicidal ideation is lacking. In a same vein, Steeg et al. (2016) conducted a study to indicate that hopelessness frequently observed in people who harm themselves is an established risk factor for non-fatal self-harm repetition and suicide.

Studies have shown that hopelessness plays an integral role in suicide (Mckeown et al., 2016). A study that was conducted by Mills and Kroner (2004) to examine "the responses of 272 offenders of medium security institution on hopelessness screening", found that hopelessness adds an equation on the prediction of prior suicidal behaviour among offenders. Equally, a study conducted by Gooding et al. (2016) characterized a prison male sample who were "at high risk of suicide in terms of hopelessness defeat and entrapment, and to determine which of the variables predicted suicidality." This cross-sectional study found that entrapment was not a significant predictor, the affective component of hopelessness predicted the likelihood of suicide. Gray et al. (2003) conducted research to assess the prediction between "violence and self-harm among 34 male institutionalized mentally disordered offenders." In the study, tested variables were strong predictors of hopelessness.

In a different study conducted by Burnside and Gaylord-Harden (2019) to "examine the role of hopelessness as a predictor of the risk for violence exposure in a sample of 831 justice involved urban boys aged 14 to 18 years. The results revealed that the baseline levels of low aspirations and hopelessness towards the future indirectly predicted violence exposure through engagement in delinquent behaviour one year later." In another study by Mckeown et al. (2016) aimed to explore the difference "between adult male prisoners with and without a history of suicidal behaviour on adult attachment dimensions, coping, and hopelessness." Offenders with significantly greater levels of anxiety, avoidance and weak coping mechanisms were reported to be prone to increased rate and highly association with escalated levels of hopelessness (Mckeown et al., 2016).

Chapman et al. (2005) in their study to examine the factors associated with the past suicide attempts in 105 female inmates. It was revealed that suicide attempts were positively correlated with personality disorders, hopelessness, sadness, and physical and emotional abuse throughout childhood with high lifetime frequency of 38.21%. Accordingly, in a study that explored "how levels of and changes in hopelessness and perceptions of procedural justice predicted depressive and suicidal outcomes in justice-system-involved-youth." Stutts and Cohen (2022) found that the suicidal ideation outcomes were predicted by baseline hopelessness and increased depression levels. Equally, Chapman, Gratz, and Turner (2013) in their study examined the "individual and environmental correlates of non-suicidal self-injury and co-occurring suicide attempts among 104 incarcerated women." According to the study, avoidant coping, physical and emotional abuse throughout childhood were favourably connected with non-suicidal self-injury, while active coping was specifically linked adversely with both the frequency and presence of non-suicidal self-injury.

Equally, in the same study by Chapman et al (2013), the presence and frequency of suicidal attempts was positively associated with history of hopelessness. Thus, hopelessness was strongly related to suicide ideation than NSSI. Perry and Gilboy (2009) in their study evaluated the prediction and validation of self-harm and suicidal risks among juveniles and revealed that hopelessness is more robust predictor of suicidal ideation than depression. In another study conducted by Govender and Schlebusch (2012) to "examine the relationship between hopelessness, depression and suicidal ideation among HIV infected persons, there was a significant correlation between hopelessness, depression, and suicidal ideation."

A study conducted by Gooding et al. (2015) with 65 male offenders examined "the ways in which perceptions of self-esteem and coping ability interacted with defeat and entrapment to both amplify suicidal thoughts and feelings and to act as a buffer against suicidal thoughts and feelings." On one hand, the presence of an elevated rate of coping skills combined with minimum rates of defeat decreases suicidality of a resilience factor for the hopelessness component of the suicidal possibility. Alternatively, a high degree of entrapment combined with poor coping skills was a significant risk factor for suicidal ideation (Gooding et al., 2015).

2.17. Social support and suicidal ideation among offenders

It is assumed that social support acts as a protective barrier between psychological and environmental stresses. Kort-Butler (2018) conceptualises social support as "a social resource on which one can rely when dealing with life problems and stressors". Cullen, Wright and Chamlin (1999) provide a comprehensive description of social support as "a process of transmitting human, cultural, material, and social capital, whether between individuals or larger social units." Kort-Butler (2018) breaks social support into multiple dimensions.

> "Firstly, as perceived, feeling supported or that support is available, versus received or provided. Secondly, social support can be instrumental, informational, or emotional. Instrumental support refers to the provision of materials or assistance with practical tasks or problems, such as lending money or borrowing a car. Informational support refers to advice-giving, guidance, or providing information that may help a person solve a problem. Emotional support involves the expression of sympathy, caring, esteem, value, or encouragement."

Finally, social support can be distinguished by its source referring to significant others or family members and friends (Thoits, 2011). The role of social support has been investigated in different fields of study. For example, social support was found to moderate the association between suicide risk and impulsivity in a study of 169 graduates that investigated the role that social support plays in the relationship between impulsivity and suicidal risk (Kleiman, et al., 2012). In another study, with an aim to investigate the protective effects of pleasant experiences and social support against suicide in a sample of 379 individuals, Kleiman et al (2014) discovered that social support directly prevented suicidal thoughts. In other words, less impulsive people were only less prone to commit suicide provided they also had strong social support system. In a study of people with epilepsy, Charyton et al. (2009) "found that social support has been shown to buffer the relationship between depressogenic risk factors and depression which is highly related to suicide."

Ding et al. (2018) state that perceived social support in their study with 92 male offenders revealed correlates with a decrease in offensive behaviour. Accordingly, Kleiman et al. (2014) in their study found that social support buffers individual effects in the relationship between negative environmental events and suicidal ideation. Moore et al. (2021) conducted a

quantitative study with 160 inmates both females and males in six correctional centres to find the quantity and types of traumatic life events they experience throughout captivity. The results reveal that relocation to other cells and being made fun of by other inmates was stressful because of loneliness. Thus, stressful life was associated with suicidality especially when inmates had low perceived social support. According to Moore et al. (2021) perceived social support plays a significant role in the relationship between stressful life and wellbeing during incarceration. Accordingly other authors maintain that individuals with poor perceived social support had a higher correlation between stressful events and depression, and that social support might mitigate the impact of unpleasant life events on the outcomes like suicide (Ding et al., 2018; Cheong et al., 2017; Kleiman et al., 2014).

2.18. Mental health policies and legislation in South Africa

In response to the problem of mental health in correctional centres, South African government adopted to its legislation (Department of Corrections Service Act 111 of 1998) and White paper on Corrections (2005), sections from Mental Health care Act 17 of 2002 which guide the department on how to deal specifically with mental ill offenders; and Criminal Procedure's Act 51 of 1977 for awaiting remands.

Chapter 2 of the Mental health Act 116 of 1993 enshrines that, "no persons who suffer from or is alleged to suffer from mental illness shall by any reason of such illness be received or detained at any place other than in accordance with the provision of the act." Section 41 (3) of the DCS Act 111 of 2008 enshrines that "the department of correctional service must provide social and psychological services in order to develop and support sentenced offenders by promoting their social functioning and mental health." Furthermore, Subsection 5(4) "sentenced offenders have the right to take part in the programs and use services offered by the department."

In addition, Subsection7 indicates that programs "must be responsive to special needs of women and they must ensure that women are not disadvantaged. The purpose of the act is to regulate mental health care so that the best possible treatment and rehabilitation services are made available to citizens."

Promulgated in 2004, the Mental Health Care Act 17 of 2002 (MHCA) has been praised for being one of the most innovative laws pertaining to mental health. According to Ramlall (2012) the extent to which it has changed mental health services and raised the standard of care is a true indicator of its. Ramlall (2012) further argues that,

> "Mental health has multiple biological, psychological and social determinants that interact in a complex manner, to provide protection of mental health or increase the risk for the development of mental. For example, a combination of genetic vulnerability, childhood trauma and adverse living circumstances brought about by poverty may predispose a particular woman to a major depressive episode."

Chapter 2 of the Mental Health Care Act 17 of 2002 aims to regulate access to,

> "mental health care in a manner that provide care, treatment and rehabilitation services to voluntary, assisted and involuntary mental health care users, mentally ill prisoners. Chapter 7, sections 49 to 58 focus on mentally ill offenders enshrining that the head of the correctional centre should designate health establishments which may admit, care for, treat and provide rehabilitation services to mentally ill prisoners and the psychiatrist is the only practitioner responsible for the enquiring mental health status of the prisoners. When the prisoner has been diagnosed with mental illness, the head of centre should take necessary steps to ensure that required level of care, treatment and rehabilitative services are provided to that prisoner."

The White Paper on Corrections (2005) ascertain that the "Department of Correctional Services must provide social and psychological services in order to develop and support sentenced offenders by promoting their social functioning and mental health. The White Paper further stipulates that the department must provide other development and support processes that meet the specific needs of sentenced offenders. Rehabilitation processes must as well be responsive to the special needs of women. Moreover, a commitment to the health of offenders requires a type of health care that incorporates both physical and mental health: . . . right of everyone to the enjoyment of the highest attainable standard of physical and mental health", (White paper on corrections, 2005, p.75).

According to the South African policy on mental health, "correctional centres should not accommodate mentally ill offenders, rather be diverted to institutions with the necessary knowledge to deal with them. That is, sentenced offenders thought to be mentally ill must be treated in accordance with the Mental Health Act. Thus, it is necessary that the decision to subject an offender to the examination provided for in the Mental Health Act is not made by a Head of Correctional Centre or member of Management alone but should be done on the basis of a psychiatric recommendation" (White paper on Corrections, 2005).

With the above being discussed, it is evident that massive research has been conducted in the field of mental health with offenders including female offenders. The Mental Health Care Act 17 of 2002 and the White paper on Corrections provide the guidelines on what should be done when there are mentally ill offenders in correctional centres. However, there is a gap on the utilisation of these services provided to offenders, and services are standardised for all offenders without considering the gender of the inmate and their special needs. In addition, there is floods

of research on different outcomes of mental health issues to offenders, but a little has been done on depression as a mental health indicator and suicidal ideation.

"Correctional officials in the correctional centres must be trained in the recognition of signs of mental illness and should be under strict orders to report immediately to the Head of the Correctional Centre should an offender appear to be mentally ill. The process for referral of an offender to a psychiatric institution must involve legal representation on behalf of the offender. Any period that an offender spends in a psychiatric institution should automatically be considered as part of the person's sentence" (White paper on corrections, 2005).

2.19. Overview of mental health policies and legislation on mentally ill offenders

The Mental Health Care Act 17 Of 2002, The Correctional Service Act 111 of 2008, and the White Paper on Corrections 2005 indicate that if there is an observation of mental illness of the prisoner, the head of prison should refer the offender to the psychiatrist for medical enquiry, and if the observation is proven to be true, then the head of the centre write a request for mental health institution establishment for the offender to be transferred to that institution. This process should not exceed 14 days before being approved by the national head of correctional services. During the awaiting days, the mentally ill offender is kept with other ordinary inmates. The policies indicate that a person mental illness is likely to cause harm either to the self or others that are staying with him/her. Furthermore, mentally challenged inmates especially with depression is prone to suicidal behaviour as per various authors discussed previously. Therefore, the 14 days waiting period may have negative impact on depressed inmates.

This leaves a question on the magnitude of mental health service utilisation by mentally ill offenders, when officers are not well trained for such problem, as they have a commitment on monitoring mentally challenged offenders. This study to be conducted with offenders examining

the prevalence of mental health services utilisation by adult female offenders. Furthermore, the approval for the offender to receive therapy has been centralised, as the head of centre has to request the approval in writing from the national head of correctional services. Therefore, the findings emanating from this study will have an influence on policy as there is a gap on the practitioners to perform an enquiry of the mental problem being observed. The enquiry is only facilitated and coordinated under medical perspective of therapy; and on admission the assessment is facilitated by unskilled individuals who used a prescribed format to facilitate assessments. Secondly, Social workers have a role to play in conducting assessments and intervening in mental health institutions; and this does not appear in correctional service regulations.

Therefore, this study seeks to firstly investigate the association between strictly depression among adult female offenders with suicidal ideation in a correctional centre. And to further investigate the role played by hopelessness and social support towards this correlate. Little is known about offenders when it comes to the relationship between these factors, rather, more literature has been focused on the experiences of correctional service practitioners working with mentally ill offenders; and elements influencing criminal's suicidal conduct. The Judicial Inspectorate in Correctional Services (JICS, 2020) and Furlong (2017) revealed that there are minimal institutions of mental health in South Africa. For instance, one in Gauteng, two in Eastern Cape, and one in KwaZulu-Natal. These institutions laid a complaint about the lack of space to put more beds. On top of the space shortage, there is a lack of trained staff to deal with mentally ill inmates in South African correctional centres. Therefore, the findings from the current research will inform policy makers on the focus on mental health statuses of adult female inmates and provide an emphasis on the need for more mental health professional practitioners.

Conclusion

To a certain extent, studies on incarcerated women in South Africa show how inadequately policies have addressed the needs of women. According to the available studies on women in prison, female criminals still experience discrimination against them because of their gender, which leads to a number of social issues that are not addressed on a more comprehensive and targeted basis. Research on women who are incarcerated indicates that a significant number of female offenders have histories of violence, financial hardships, and disruption at their homes. The enquiry is only facilitated and coordinated under medical perspective of therapy; and on admission the assessment is facilitated by unskilled individuals who used a prescribed format to facilitate assessments. Secondly, Social workers have a serious task to perform in conducting assessments and intervening in mental health institutions; and this does not appear.

CHAPTER 3
THEORETICAL FRAMEWORK

The social science study is understood under the guidance and basis of a theoretical framework. This chapter provides important theoretical frameworks that will serve as a lens through which the research problem and research questions will be evaluated. Interpersonal theory of suicide (ITS), hopelessness theory of depression (HTD) and social support theory (SST) will couch this study. ITS and HTD will focus on a micro level (offenders' personality) and SST focus on macro level of the study phenomenon to investigate broader social influences. This chapter further provide studies in different fields and settings where the three theories were used successfully to frame research.

3.1.Interpersonal theory of suicide

Suicide is one of the worrying causes of unnatural deaths in South African correctional facilities. Both intrapersonal and interpersonal factors significantly contribute and influence suicidal behaviour. According to Chu et al., (2017) the Interpersonal theory of suicide (ITS) is a framework that is strategic in addressing the problem of suicide attempts. The theory has made a significant contribution to understand suicide and related disorders in both science and medicine. Joiner (2005) first proposed ITS, which Van Orden (2010) developed on the premise that people who have interactable and intractable feeling are more likely to consider suicide. These feelings emerge from three main constructs, perceived burdensomeness, and thwarted belongingness (central to suicidal behaviour) and that when suicidal desire and acquired capability for suicide are present, near-lethal suicidal behaviour happens (Nock et al., 2018; Chu, et al., 2017; Van Orden, 2010). With ITS people commit suicide because they can and because they want to.

Ayub (2015) argues that suicidal ideation is influenced by both intrapersonal and interpersonal dimensions of thinking and feeling. Joiner (2005) posits that the key concept of ITS is its focus on offering justification for people who consider suicide. Furthermore, according to ITS, there are different processes that lead to the development of suicidal behaviour and desire, both in mortal and everlasting forms (Chu et al., 2017). That is, when one is repeatedly exposed to upsetting and terrible situations, their fear of dying and their pain threshold decrease becomes accelerated (Joiner, 2005; Chu et al., 2017; Jordan, et al., 2019). Van Orden et al. (2010; p. 600) presented the following verifiable hypotheses of ITS:

- "Thwarted belongingness and perceived burdensomeness are proximal and sufficient causes of passive suicidal ideation.
- The simultaneous presence of thwarted belongingness and perceived burdensomeness, when perceived as stable and unchanging (i.e. hopelessness regarding these states), is a proximal and sufficient cause of active suicidal desire.
- The simultaneous presence of suicidal desire and lowered fear of death serves as the condition under which suicidal desire will transform into suicidal intent.
- The outcome of serious suicidal behavior (i.e. lethal or near lethal suicide attempts) is most likely to occur in the context of thwarted belongingness, perceived burdensomeness (and hopelessness regarding both), reduced fear of suicide, and elevated physical pain tolerance."

Core constructs and specific hypothesis of the interpersonal theory of suicide

ITS designates that suicidal ideation is an outcome of thwarted belongingness which assumes that people have a fundamental need to belong (Joiner, 2005). When that need for belonging is not satisfied, it can have a variety of detrimental effects on one's health, such as a rise in the

number of suicidal attempts and fatalities across the board (Van Orden, 2010, 2016; Chu et al., 2017). Components of ITS "include self-reported loneliness, fewer friends, living alone, non-intact family, social withdrawal, and family conflict" (Van Orden et al., 2012). The second construct of ITS is perceived burdensomeness. The perceived burdensomeness is the second component of ITS which effectively captures the aspect of social disengagement, particularly the inappropriate belief that one's own mortality is more valuable than one's life to others (Chu, et al., 2017). The theory speculates that people who think about, attempt, and die by suicide interpret their self-hatred into expanded feelings (Van Orden, 2010). Thus, magnitude of perceived burdensomeness includes perceptions of guilt and self-hate (Van Orden et al, 2014).

Finally, ITS is constructed through capability to commit suicide. "Acquired capability refers to the person's ability to become desensitized to pain or repeated exposure to painful events and habituate to fear of death" (Joiner, 2005, 2009). Thus, suicidal desire can therefore become suicidal purpose when the dismay of death decreases (Van Orden et al., 2014). Moreover, Kleinman (2009) suggests that though views and beliefs about suicide fluctuate among cultures and geographical areas, concepts of acquired competence, perceived burdensomeness, and thwarted belongingness remain relevant. Pirkis et al. (2011) on the same vein states that stigma that is attached to individuals contribute significantly to the suicide rate in communities. Hence, the stigma that is attached to offenders especially women may lead to suicidal ideation and sometimes attempts, among female offenders due to cultural beliefs and values. Thus, the study that seeks to investigate the intervening role of hopelessness between depression and suicidal ideation is important among this vulnerable group.

The ITS has been globally applied in different research settings and with diverse samples. For example, Monteith, Banrain, and Menefee (2017) conducted a study to examine "whether

constructs derived from the interpersonal theory of suicide were associated with suicidal ideation among 92 female veterans who had experienced military sexual trauma when adjusting for known risk factors for suicide." Perceived burdensomeness and thwarted belongingness were significantly associated with suicidal ideation. In their study, Mandriacchia and Smith (2015) examined 'interaction between perceived burdensomeness and thwarted belongingness as predictors of suicidal ideation among male offenders.' The study discovered that the interaction of thwarted belongingness and perceived burdensomeness was associated with severe suicide ideation. Therefore, incarceration because of its setting, is likely to promote thwarted belongingness and perceived burdensomeness among offenders, which makes it unsurprising that the prevalence of suicidal ideation can be higher amongst offenders than the non-incarcerated population, especially women. One of the main ideas behind ITS and its evolution is that most people who consider suicide do not really attempt suicide. This emphasises the need to explain this phenomenon.

In a study conducted by Hagan et al (2015) in 189 undergraduate students to "examine the role of hopelessness in the interpersonal theory of suicide on the interaction of thwarted belongingness and perceived burdensomeness when predicting suicidal ideation, plans and urges." While thwarted belongingness and perceived burdensomeness were found to be the key factors in suicidal ideation, plans, and urges, these findings propose that it is when they exist in the presence of eminent levels of hopelessness that their effect is the most critical. In a different context Fink-Miller (2015) conducted a study to explain the suicidality behaviour in 419 physicians. The results indicated that the ITS construct scores of physicians are similar to those of other groups that showed higher suicidality. Suicidal ideation was most strongly predicted by perceived burdensomeness, but previous suicide attempts were related by thwarted

belongingness. Cukrowicz et al. (2013) conducted a study to "test theory-based predictions regarding variables that contribute to death ideation and suicide ideation in 239 older adults" from primary health care facility. Accordingly, Forkman et al. (2020) conduct research with an aim to evaluate the main predictors of ITS "regarding the importance of perceived burdensomeness, thwarted belongingness and capability for suicide in predicting future suicide attempts." The study revealed that among the three constructs of ITS, when screening for potential suicide attempts in the future, perceived burdensomeness had a moderate performance and a substantial main effect (Forkman, et al., 2020). Similar, to the latter, results revealed that the constructs of interpersonal theory of suicide are significantly related with variability of suicidal ideation.

With reference to the above discussion and results from the studies in different fields, the use of ITS to examine suicidal ideation and its correlations is substantially supported. Hence the application of ITS in a different sample, female offenders, is important to test and add its validity in research. ITS is relevant for this study as someone with thwarted belongingness might have lost hope; and hopelessness is a significant contributing cause of depression (Liu, Kleiman, Nestor and Cheek, 2015). The ITS proposes a comprehensive framework to understand the complex interplay of psychological, social, and interpersonal factors that contribute to suicidal thoughts and behaviours. It further provides insights into how individuals' perceptions of burdensomeness, thwarted belonging and acquired capability interact to alleviate suicide risks. In the context of female offenders in correctional centres, this theory shed the light on the relationship between depression and suicidal ideation. Van Orden (2014) adds that a critical prediction of interpersonal theory of suicide regarding thwarted belongingness and perceived burdensomeness is hopelessness which intensifies suicide risk. Thus, the integration of

hopelessness theory of depression is equally important to frame this proposed study to examine the role of hopelessness towards suicidal ideation.

3.2.The Hopelessness Theory of Depression

The shortcomings of Martin Seligman's (1972) learned helplessness theory of depression led to the development of the Hopelessness Theory of Depression (HTD). The Learned Helplessness theory of depression was based on an experiment which found that "dogs that have been repeatedly exposed to uncontrollable shocks would cease to attempt to escape even when this possibility was made available to them" (Liu et al., 2015; Alloy, Abramson, Metalsky & Hartlage, 1988). In 1978, Seligman and Abramson added some thinking components to the theory that led to the attributional reformulation of the learned helplessness theory of depression. According to Abramson, Seligman, and Teasdale (1978) "people are depressed because of attributions they make for why unfortunate things happen. This makes people prone to depression because they make pessimistic attributions that cause them to believe that there is nothing they can say or ever do to change their unfortunate circumstances."

Hopelessness can be referred to as "the expectation that highly desirable outcomes will not occur and that one is powerless to change the situation" (Metalsky & Joiner, 1992, p667). HTD was developed by Abrahmson, et al. (1989) to explain the role that hopelessness may play in depression. According to HTD, when uncontrollably unpleasant environment stimuli are repeatedly encountered, one eventually comes to believe that the unpleasant circumstance is unavoidable and feels powerless to change it (Abramson, 1989). Alloy et al. (1988) asserts that HTD is of the idea that a closely linked cause of depression is an expectation that highly unpleasant outcomes are likely to occur, and that no response in one's attempt to help will change the likelihood of the occurrence of these outcomes. HTD further suggests that depressive

symptoms are most likely to occur when two factors are present at the same time (Alloy et al., 1988; Abramson, et al., 1989): that is, a vulnerable person and negative environmental circumstances.

A vulnerable individual is the one exhibits the negative pessimistic explanation style, also known as depressogenic attribution style which is a way of analysing the reasons behind indifferent life experiences (Abramson, et al., 1989). According to Kneebone et al. (2015) individuals who perceive negative events as originating from within rather than outside, that is from something that impact as a wide range of situations globally instead of being limited to specific range of circumstances locally, and from factors that are persistent rather than transient are thought to be more prone to depression. Thus, the person thinks s/he will endure over time and endlessly. HTD was developed by Abrahmson, et al (1989) to explain the role that hopelessness may play in depression.

HTD is a theory-based approach to the categorization of a subset of depressive disorders. According to Alloy and Clements (1998) HTD specifies the proximal cause of a subtype of a disorder as well as etiological chain of events leading to the development of the subtype. Hankin, Abrahmson & Siler (2001) specifies two etiological factors of HTD. Firstly, "vulnerability-stress component which cognitive vulnerability is hypothesized to interact with the negative life events to contribute to the formation of hopelessness in turn depressive symptoms. Secondly, hopelessness should mediate the relation between vulnerability-stress component and increase hopelessness depressive symptoms" (Abramson, et al., 1989; Hankin, et al., 2001; Panzarella, et al, 2006; Haeffel, et al., 2017). Moreover, Abela, et al. (2011) assert that there are different tendencies that are presented from individual's vulnerability to depression. In the same vein, Abramson, et al. (1989) state that one feels powerless and hopeless in adversity situations is

because they think they have no control over what happens, thus they do not want to try to change it.

Duke et al. (2011) adds that as per HTD, hopelessness is "the subtype of major depression and manifests suicidal ideation, depressive anxiety, anger irritation, alcohol drug use and violent offending." The advantage of HTD is that it serves as a recovery model from hopelessness depression. That is, when an unfriendly life event occurs, people who tend to interpret things negatively are more likely to feel hopeless and depressed. Alternatively, people who tend to interpret things positively like drawing conclusions about reasons behind events, its outcome and qualities of their own that are linked to positive life, are more likely to feel upbeat and overcome depression (Panzarella, et al., 2006). Thus, the application of HTD in a study that examine the correlates of hopelessness and suicidal ideation is relevant especially with female offenders who are prone to lose hope after incarceration and who may develop suicidal thoughts.

HTD predicts which symptoms should cohere together in a syndrome as a result of the cause and therapeutic as well as preventive strategies that are likely to be specifically effective (Alloy & Clements, 1998). According to DSM-V (APA, 2014) a diagnosis of hopelessness depression requires "at least two weeks of hopelessness with at least five of 11 symptoms: sadness, retarded initiation of voluntary responses, suicidal ideation or behaviour, sleep disturbance characterised by insomnia, fatigue, self-blame, concentration difficulties, psychomotor retardation, worrying, reduced self-esteem, and dependency" (Liu et al, 2015; Combs, 2021). Other symptoms hypothesized by the HTD are suicidal ideation, lack of energy, apathy, disturbed sleep, and difficulty in concentration. Hence, the HTD also accounts for suicidal ideation and behaviour (Liu et al, 2015). Incarcerated population (offenders) get involved in prolonged exposure to uncontrollable aversive circumstances.

Hopelessness theory of depression has been applied in different fields and sample groups with reference to mental health, abnormal psychology, clinical psychology, social psychology, criminology, and justice. For example, the HTD was used to test its predictions and applicability among adolescents (Hankin, Abramson & Siler, 2001), three studies to determine if the cognitive vulnerability factor featured in Hopelessness theory could be reliably measured in diverse samples including juvenile male detainees in health context (Haeffel et al, 2017), psychology study to test diathesis-stress and causal mediation component in 5th and 8th grade children (Abela, 2011). Most studies tested the subtypes and application of HTD (depression and anxiety) with different samples and most have reported inconsistent empirical evidence. Nevertheless, HTD has received considerable attention looking at vulnerability-stress and depression of the affected.

Due to the setting of correctional services institutions, women incarceration may develop hopeless and helpless thus believe that there is nothing that they can do to change the situation they are at, hence, any means of support available may be a positive contribution during their lifetime in correctional facilities. To support this importance, Panzarella et al. (2006) provided an elaboration of HTD to incorporate adaptive inferential feedback, a kind of social support in which a peer rectifies a mistaken conclusion with a constructive one. The subsequent section discusses the mezzo theoretical framework which is closely linked to the micro theories.

The hopelessness theory of depression is a psychological framework that elucidates how feelings of hopelessness serve as a significant contributor to the development and exacerbation of depressive symptoms. In the context of incarcerated female offenders, this theory provides valuable insights into the complex interplay between hopelessness, depression and suicidal ideation. Hopelessness theory of depression posits that when individuals perceive their circumstances as unchangeable and hold a pessimistic view of future, they become more prone to

experience depressive symptoms. In a correctional environment where their lifestyle is restricted, female offenders are likely to lose hope thus increasing risk of suicidal ideation. The experience of hopelessness intensifies the emotional and cognitive aspects of depression, leading to heightened risk of developing suicidal thoughts. According to Panzarella et al. (2006) as feelings of hopelessness increase due to limited support, individuals are likely to view suicide as a potential solution to escape their distressing circumstance.

3.3.Social support theory

The last theory that underpins this study is the Social Support Theory (SST). The theory of social support posits that people who have strong supportive networks and relationships are better able to handle with stressors and preserve their mental wellbeing (Feeney & Collins, 2015). SST was introduced and then developed by several scholars (House, 1981; Cohen & Wills, 1985; Thoits, 2011). The term "social support" was made up in the late 20th century and it has been written about for a few decades (Cohen & Wills, 1985). According to Hupcey (1998), social support is a multifaceted concept that has been thoroughly examined due to the difficulty of defining it in a scholarly context. That is, social support as a concept refers to a notion that is often used to quantify how people feel about the support, encouragement, and responses they receive from others in their context (Shumaker & Brownell, 1984). Thus, "assistance may be tangible as financial support or intangible as in emotional help" (Langford et al., 1997, p 95). For example, in an effort to improve health outcomes, physician-epidemiologists have connected the social support construct to physical health (Cassel, 1976; Cobb, 1976); and first used it in the literature on mental health Caplan (1974).

The literature emphasised the importance of social interactions in protecting individuals from psychosocial stress (Cassel, 1976). Accordingly, Cohen and Wills (1985) introduced two

key hypotheses centred on how social support may impact people's health. House et al. (1988) further utilised applicable literature to form a causative link in relation to health and social support. Colvin, Cullen and Vander Ven (2002) state that the social support theory (SST) is "rooted in the ideas advanced by the Chicago school, based on how organised networks of human relations can assist people in meeting both expressive and instrumental needs that prevent crime." SST stems from the sociology of mental illness, which indicates that social support mitigates the impact of stress (Orrick et al., 2011). Different theoreticians add that social support is a complex and fluid concept that involves interactions between recipients and providers (Shumaker & Bownel, 1984; Hupcey, 1998; Fleury, 2009; Hochestetler, De Lisi & Pratt, 2010; Song & Lin, 2014). The theory appears to be the most significant aspect of social support that needs to be considered when the concept is measured and examined. SST is applicable in this study to assess the intervening role of social support in the relationship between depression, hopelessness and suicidal ideation among adult female offenders.

The theoretical classifications of social support could be placed into different components (House, 1981; Cohen et al., 1985; Feury, et al., 2009). The first category points to the information resources that are provided by other people. Secondly, Hupcey (1998, p. 1232) conceptualises social support as "the extent to which individuals believe that their needs for support, information, and feedback are fulfilled". The third category is the intentions of the support provider that is viewed as an exchange of resources between two individuals with an intention of enhancing the well-being of the recipient (Shumaker & Brownell, 1984). Category four looked at the reciprocal function of support which is the actual giving, receiving and exchange of support (Hupcey, 1998). Finally, social support being understood to be a support provided to a person through connections to other people (Hupcey, 1998; House, 1981). Further

theories on social support suggested that it is more than just a means of support and safety (House, 1981). However, social support is clearly defined by Will (1991) as the sense that one is appreciated and valued by others, where one feels deeply esteemed and a vital part of the community of reciprocal assistance. Thus, the development of social support theory (SST) and research began in the mid-70s (Cobb, 1976, Sarason & Sarason, 2009). SST incorporates both small- and large-scale life-related variables.

Elements of Social Support Theory

According to House (1981) and Barrera (1986) emotional, informational, instrumental, and appraisal support are components of the SST. The foundation of SST is the idea that providing emotional, instrumental and informational support can mitigate the negative impacts of stressful life situations (Sarason & Sarason 2009) as discussed later.

(a) Informational support

According to House (1981), informational support refers to "information provided to another during time of stress" (p. 32). In their study, Tilden and Weinert (1987) confirmed the value of informational corroborated the utility of informational support during the process of solving the problem. This kind of assistance identifies the tools and coping strategies required to deal with a difficult circumstance in a person's life such as knowledge, advice and feedback on actions.

(b) Emotional support

Emotional support involves the "provision of caring, empathy, nurturance and trust between two persons or more" and the most crucial attribute through which the perception of support is expressed to others (House, 1981, p. 96). Thus, emotional support could also serve as the affective assistance from one being to the next. According to Simoni, Frick and Huang (2006) a

person who receives emotional support is able to maintain a positive outlook, which in turn increases their self-efficacy. Due to the availability of emotional support from both fellow inmates and correctional staff may prevent female inmates from developing loss of hope.

(c) Instrumental support

Instrumental support is regarded as the provision of tangible assistance from one party to the other (Tilden & Weinert, 1987). Tangible assistance according to Tilden and Weinert (1987) refers to tangible or substantial support, such as giving money or doing tasks or work that has been given to another person on behalf of others.

(d) Appraisal support

Unlike informational support which aims to remedy the issues, appraisal support articulates knowledge related to self-evaluation (House, 1981). The appraisal also known as affirmation support is when someone communicates that what people have done or said is still relevant (Kahn et al., 1980). It is based on the idea that providing someone with feedback and affirmation is an essential motivation to consistently employ coping mechanisms and other resources useful to effectively handle stressful events in life.

At first, social support was mostly studied in regard to its buffering role between stressors and health consequences (Cobb, 1976). According to Cassel (1976) social support functions as a moderator of the negative health consequences that stressful life events can have. The researcher is aware that numerous models have been developed over the preceding years which connect social support to mental health and suicidal ideation. The majority of these theoretical modelling initiatives aim to clarify how social support functions so vitally within the context of distress. Numerous academic fields, including nursing, sociology, medicine, public health, criminology and psychology have researched and implemented social support.

Many studies have used cross-sectional surveys to examine the level of support and the majority of the results a contradictory. For example, according to a study by Roxburgh (2006) who "investigated perceived support from partners and co-workers and found that partner support does not have moderating effects for both gender groups. The support received by men from co-workers was deemed to convey a significant negative impact on depression." The social support hypothesis was first introduced by Francis Cullen in the context of crime and delinquency research in 1994 (Kort-Butler, 2017). Therefore, Kort-Butler (2017) proposes that any support while in the criminal justice system plays a significant role and meaning for successful rehabilitation and social control. Hence lately, research that focuses on incarcerated population group has drawn attention.

Research on social support among incarcerated populations has been immensely conducted. For example, a quantitative study with carried out by Huang, et al (2020) to "examine the mental health state of confined offenders in detention centres and related factors, and to introduce psychological resilience, self-acceptance and perceived social support." The study revealed that some socio-demographic factors have a significant influence on the mental health status of offenders. Social support and self-acceptance were found to be protective factors for mental health status of offenders. In a similar study, Rogers, Jordaan and Esterhuyse (2022) conducted that aimed to identify the "possible predictors of correctional adjustments among male offenders in a private, maximum security correctional centre in South Africa with 418 male offenders." The results indicated that the combination of some variables predicted the internal adjustment and external adjustment after release.

Accordingly, Lila, Gracia and Murgui (2013) conducted research to analyse "both the influence of social support and stressful life events on the psychological adjustment intimate

partner violence offenders and victim blaming attributions. The results showed that social support and stressful life events were related to psychological adjustment." Alternatively, Solbakken and Wynn (2022) conducted a qualitative study with eight offenders to explore incarcerated individual's perspectives of social support from various resources in the transition from community to prison and from prison to community. The study further looked at the significance of mental health and opportunities and barriers on accessing social support in Norwegian prison. The findings reported that social support in the form of companionship, feeling of belonging, shared activities, and everyday conversations were more important than support that focus on coping with stress of incarceration (Solbakken & Wynn, 2022).

In a different study, that aimed "to evaluate the role of social network quality and quantity on unprotected sex, criminal risk and substance among 330 offenders", Spohr et al. (2016) firstly found that both the quantity and quality levels of social support were strongly correlated with decreased risky behaviour and substance use. It is emphasised that genuine help from others can improve coping and mitigate the impact of stress by matching the needs of the situation.

In conclusion, hopelessness theory of depression posits that with hopelessness there is a belief that things will never change. On one hand, those whose hope has been lost it is because of their poor interpersonal abilities which will negatively influence all their social interactions. On the other hand, Liu et al. (2015) argue that individuals are at lower risk for depression if they attribute the same event to be acquaintance's irritability, brought about by having a bad day and believe this as uncharacteristic of their social interactions. Thus, hopelessness theory of depression is a suitable theory to be used in this study to investigate the role of hopelessness in the relationship between depression and suicidal ideation among adult female offenders. guided

by the HTD to select the correct measuring tool for hopelessness and depression symptomology was essential for this study.

On the same note, one of the premises of social support theory is that people who perceive strong social support networks are better equipped to cope with stressors, psychological encounters and adverse circumstances (Song & Lin, 2014). SST posits four dimensions where one can perceive on as support system. That is emotional, instrumental, informational and appraisal support (Tilden & Weinert, 1987). For the female offenders who experience isolation, separation from their families and limited access to external support systems feelings of hopelessness and depression can be exacerbated. Thus, different social support mechanisms from either fellow inmates, correctional officers, or external contacts can serve as a protective factor against the negative psychological effects of incarceration. SST served as a guiding theory on the selection relevant measurement to assess the role of social support on the relationship between depression and suicidal ideation among adult female offenders in a confined environment with restricted activities that can be performed by and different from that of offenders.

The interpersonal theory of suicide offers a valuable framework to understand the level and elements of suicidal ideation among female offenders. ITS is a framework that provides an understanding of interpersonal processes that contribute to suicidal behaviour (Van Orden et al., 2005). It further explains how people do who mostly think about suicide do not attempt or commit suicide (Moseley et al., 2022). Its emphasis is no perceived burdensomeness, thwarted belonging and acquired capability to take one's own life (Van Orden et al., 2005). ITS was relevant for this study to provide a guide on the most relevant measuring tool of suicidal ideation among adult female offenders.

The adoption of hopelessness theory of depression, social support and interpersonal theory of suicide there provides a better investigation of the prevalence of the symptoms of depression, hopelessness, and suicidal ideation among adult female offenders in the current study. This guide allows the valid conclusions on the relationship between depression and suicidal ideation and investigating the roles of hopelessness and social support between depression and suicidal ideation which is hoped to contribute into the development of targeted interventions aimed at reducing suicide risk and promoting mental wellbeing among incarcerated women.

CHAPTER 4

RESEARCH METHODOLOGY

This chapter discusses the research methods utilised in the study. The main aim of this study was to investigate the relationship between depression and suicidal ideation among incarcerated female offenders at a selected correctional facility in South Africa. The study further investigated the role of hopelessness and social support in the relationship between depression and suicidal ideation. The study proposed to focus on both awaiting detainees and sentenced female offenders in the centre. However, the study focused only on sentenced offenders than remand detainees. the term offenders refer to the sentenced individuals only as the study aims to focus on those. To be discussed in this chapter is the research approach, paradigm, design, presentation of study hypothesis, population of focus and sampling, data collection method and instruments, management and analysis of data. Finally, issues of ethics and limitations in this study are discussed.

4.1. Research approach

This is a quantitative study. A quantitative study looks for correlations and associations by identifying and isolating particular variables that are part of the study's framework (Babbie, 2010). Moreover, the quantitative method aims to mitigate the impact of the factors by managing data collection environment, and to test hypotheses and figuring out the link and change from one person to the other within a population (Leavy, 2017). According to Babbie (2007) researchers try "to recognise, isolate and define variables of interest within the study and then test them to find the relationships, correlations and causality between them."

4.2. Research Paradigm

Researchers see worldview as a general theoretical orientation about the world and the nature of research that a researcher brings to a study (Cresswell & Cresswell, 2014, 2018). A research paradigm is a "philosophical worldview that carries a set of assumptions that guide research process" (Leavy, 2017, p. 13). Guba and Lincoln (2001) argue that "truth in research is regarded as either value-laden (criticality) or subjectively biased (constructivism), or rather strictly objective (positivism) or partly objective (post-positivism)." Thus, this study fits well within the post-positivistic paradigm which poses that the objective principle, which is essentially subjective is the foundation of the post-positivistic worldview (Carter & Hurtado, 2007). Thus, post-positivists' analysis of issues reflects the need to pinpoint and evaluate the factors influencing results and distil concepts into a narrow, distinct set of variables for testing, such as those that make up research questions and hypotheses (Babbie & Mouton, 2018; Punch, 2014; Carter & Hurtado, 2007). Various authors assert that knowledge that develops through a post-positivist lens is based on careful observation and measurement of the objective reality that exists in the world.

Post-positivist paradigm is adopted in this quantitative study to examine objective hypothesis by looking at the relationship among cases. A quantitative approach was developed within two main strands (Bhattacherie, 2012; Punch, 2014). That is comparison based on experimental test and analysis of variances as its main statistical features. Secondly, the relationship between variables based on reasoning with correlation and regression as its main features. Quantitative approach and post-positivist paradigm are relevant and applicable to this study as it aims to investigate the relationship between depression and suicidal ideation, with a

hypothesis that hopelessness and social support have intervening roles between depression and suicidal ideation among adult female inmates.

4.3. Research Design

A research design is an organised inquiry that offers precise guidance for research processes and a strategy outlining the manner in which research will be carried out (Babbie & Mouton, 2018; Creswell, 2014; Terre Blanche, Derrhuim & Painter, 20). A research design "involves a set of decisions regarding what topic is to be studied among what population with what research methods for what purpose" (Fouche, Delport & De Vos, 2011, p. 142). According to Fouche et al (2011) quantitative research design is categorised into experimental and non-experimental research. This study is non-experimental. According to Babbie and Mouton (2018) the three most prevalent and beneficial goals of research design are description, explanation, and exploration. The study quantitatively adopted a cross-sectional descriptive and explanatory designs to investigate the correlation between depression and suicidal ideation as these are phenomena that have not been extensively studied among female offenders in South Africa.

This descriptive and explanatory designs were informed by the research paradigm adopted in this study. The purpose of descriptive-explanatory design "is to discover and develop methods that can be employed in future research studies" (Babbie, 2014). These designs are pertinent in this study since they enable a larger study with more participants to improve population's generalizability at one point in time (Neuman, 2014). Compared to exploratory research, descriptive design is more structured and seeks to give a valid and accurate description of the variables relevant to the research topic (Bhattacherie, 2012; Punch, 2014). Terre-Blanche et al (2011) further state that in a quantitative research descriptive design aims to describe the phenomena accurately or measuring relationships. In this study descriptive design describes the

magnitude of depression and suicidal ideation, as well as hopelessness and social support among female offenders.

According to Babbie (2014), explanatory research aims to offer causal explanations for observed phenomena, issues, or behaviours. It further makes connections between the target phenomenon and its causative components and consequences (Punch, 2014). Explanatory studies are designed to identify causality and focus of the designs should be on eliminating plausible rival hypotheses (Terre Blanche et al., 2011). Descriptive-explanatory design best suit this study to quantitatively describe the central variables (depression and suicidal ideation) and then explain the role of hopelessness and social support between depression and suicidal ideation. The hypothesis to be measured are provided in the next section. Since the study topic suited the quantitative approach, the researcher had access to important statistical and computational measurement techniques and hypotheses to best accomplish the overall study's aim without the researcher's bias in during data collection and analysis.

4.3.1. Hypotheses

The proposed study hypothesizes the following among female offenders:

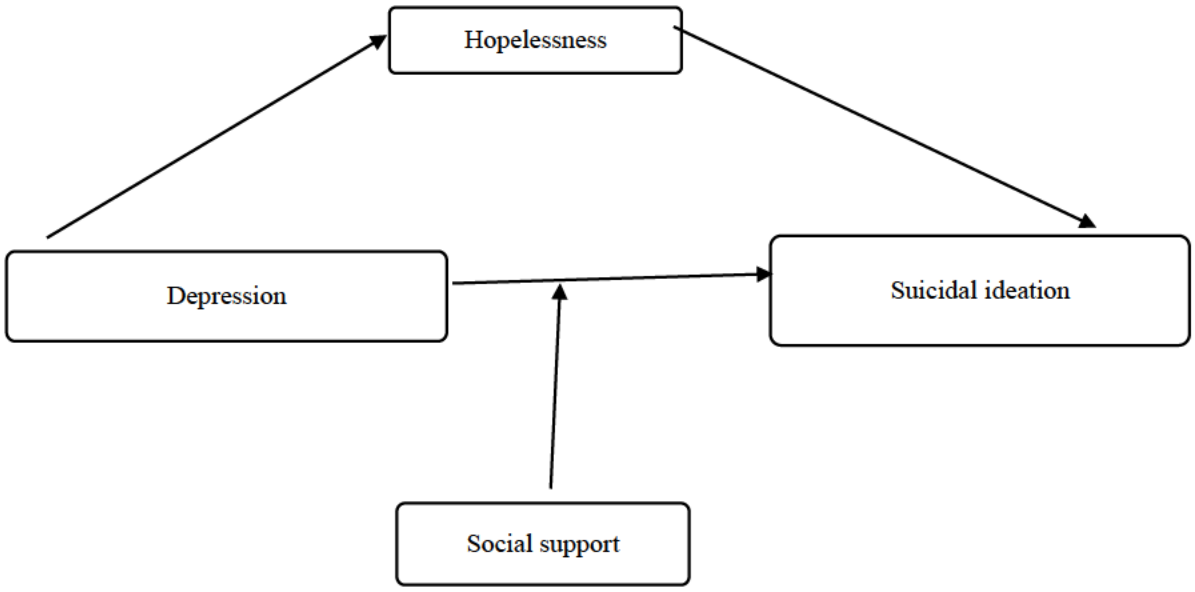
H1: Depression predicts suicidal ideation among adult female offenders.

H2: Hopelessness mediates the relationship between depression and suicidal ideation.

H3: Social support moderates the relationship between depression and suicidal ideation.

Figure 3 displays the proposed model of the key research variables.

Figure 3: Hypothesized model of the Central Study variables



4.3.2. Variables

The main variables that were be measured in the study include:

Depression (Independent variable): depression is defined symptomatically by the Diagnostic Statistical Manual of mental disorder-V as "a brain disorder characterised by a persistently depressed mood or loss of interest in activities, causing significant impairment in daily life" (APA, 2013, DSM-V). The presence of depression is seen through the observation of the following symptoms: loss of interest or pleasure, decreased energy, feeling of guilt, low self-worth, poor concentration, and disturbed appetite or sleeping (APA, 2013). Depression was measured using the 15 of 25 items of Hopkins Symptoms Checklist (HSCL-25) that in a Likert scale format ranging from weight 1 (not at all), weight 2 (a little), weight 3 (quite a bit) and

extremely that weighted 4. Extremely indicated high depression while not at all (1) indicated no depression. That is ranging between 15 to 60.

The term *Suicidal ideation* (Dependent variable) refers to when the respondent indicates to the question that one has some serious contemplation about committing suicide (Egziaber et al., 2018). Suicidal ideation was measured using the Beck Scale of Suicidal Ideation (BSSI) which is a commonly used tool for evaluating suicidality (Esfahani, Hashemi & Alavi, 2015). The total score ranges from 0 to 38, with each item being scored on an ordinal scale from 0 to 2. All participants in this scale responds to the first five screening items; if their responses to the fifth item are positive (score 1 or 2), they respond to the remaining items; if not, the questionnaire is considered completed.

Hopelessness (Mediating variable): according to Lui et al, (2015) a minimum of two weeks of hopelessness combined with at least five of 11 symptoms are required for diagnosis of hopelessness: suicidal thoughts or behaviour, delayed voluntary responses, sadness, sleep disturbances marked by insomnia, exhaustion, self-blame, trouble with focusing, psychomotor retardation, anxiety, low self-esteem, and dependency. The Beck Hopelessness Scale (BHS-20) with 20 items which were answered with either True or False was used to measure hopelessness. This measure assessed three dimensions considered to indicate hopelessness: individuals' expectations, loss of motivation and feelings about the future.

Social support (Moderating variable) is commonly defined as "either the perceived, actual expressive or instrumental support provided by informal relations or formal agencies" (Cullen, 1994; Lin, 1986). Zimet extends this definition to include helping and protection provided to others or from others (Zimet et al, 1988). Linkert scale 1 (Extremely Disagree) to 7 (Extremely Agree) was used.

4.3.3. Measures

Data collection tools were generated using four previously approved scales to measure the central variables of the study. Measurements are discussed below.

Measurement of Depression

Depression was measured with the Hopkins Symptoms Checklist Scale-25. The Hopkins symptoms checklist scale (HSCL-25) is understood as a tool that can be used to measure anxiety, depression, and other relevant symptoms (Baired, 2016). The HSCL-25 has been found to be useful in medical settings to identify patients with emotional distress. It was firstly introduced in 1954 for use in primary care setting at Johns Hopkins University by Parloff, Kelman and Frank (Baired, 2016). Anxiety and depression have been screening with HSCL-25. Kleijn, Hovens and Rodenburg (2001) state that HSCL-25 is divided into two sections: 10 items in part 1 assess symptoms of anxiety and 15 items in part 2 measure depression as described by the American Psychiatric Association's Diagnostic and Statistical Manual V (DSM-V).

From the HSCL-25, only part 2 (15 items) was used to measure depression among adult female offenders. HSCL-25 uses a Likert scale ranging from weight 1 (not at all), weight 2 (a little), weight 3 (quite a bit) and extremely that weighted 4. Extremely (4) indicated high depression while not at all (1) indicated no depression. That is ranging between 1 to 60. This scale has also been successfully used in a similar context with female offenders in Kenya, Africa (Kamoyo, Barchok, Mburugu and Nyaga, 2015).

Measurement of Suicide Ideation

Suicidal ideation was measured with the use of Beck's scale of suicidal ideation (BSSI-19). BSSI is a 19-items instrument that evaluates the existence and potency of suicidal thoughts two weeks

before evaluation (Beck, Kovasac, & Weissman, 1979). The scale is an ordinal scale with three response categories from 0, 1 and 2 respectively with the total score that ranges between 0 to 38. The higher values indicate a greater risk of suicide. According to Esfahani, Hashem and Alavi (2015) all participants are to respond to the first 5 items. If a participant's answers to the fifth item are positive (scores 1 and 2), he/she responds to the rest of the items, and if there are negative responses, the participant does not continue with the rest of the questionnaire, then the questionnaire is complete. The participants were instructed to select 1 (one) statement from each group that was most applicable to them. Van Orden et al (2010) explain that when two interpersonal constructions are present at the same time, thwarted belongingness and perceived burdensomeness, the most deadly kind of suicide desire results. Cronbach's coefficient alpha for Beck's Scale of Suicide Ideation yielded a high coefficient alpha 0.89, indicating high internal reliability.

Measurement of Hopelessness

Hopelessness was measured with Beck's Hopelessness Scale (BHS-20). Beck's Hopelessness Scale (BHS) is a 20-itemised self-report inventory with two response categories namely, False and True measure as 1 and 2 respectively (Beck & Steer, 1988). Dr Aaron T. Beck developed BHS-20 to measure three core fundamentals of hopelessness: loss of motivation, expectations, and feelings about the future (Beck, 1988). According to Beck (1988) the scale can be used with adults aged 17–80. This scale has been found to be useful in identifying suicidal risk among individuals living with depression who may have made suicide attempts (Beck, 1988). Esfahani et al. (2015) found the scale reliable with the Cronbach's alpha coefficient of 0.82 to 0.93 in general population.

The Beck Hopelessness Scale (BHS), using a cut-off score of 9, is predictive of both lethal and non-lethal suicide attempts. According to Esfahani et al. (2015) for those who ultimately committed suicide, the likelihood of positive results was .78 for non-fata suicide attempts and .80 for those who died by suicide. Furthermore, Liu et al (2015) study titled 'the hopelessness theory of depression: a quarter century in review". The Beck's hopelessness scale found evidence of high internal consistency with a more comprehensive measure of hopelessness depression symptoms ($\alpha = .81$), with an acceptable mean inter-item correlation ($r = .28$).

Measurement of social support

Social support was measured with the Multidimensional Scale of Perceived Social Support (MSPSS). MSPSS is created with 12-items to assess the relationships of respondents with family, friends, and significant others in the subsequent domains respect (Zimet et al., 1988). The MSPSS-12 items measured perceived social support and these items were distributed into factors group pertaining to the source of support namely family, friends, and significant others. Each of these subscales include four items that are rated on a 7-point Likert type scale ranging from very strongly disagree weighted 1, to very strongly agree weighted 7 because the aim is to reduce the ceiling effect and increase variability (12 to 84) (Zimet et al., 1988). In a study by Wittenborn et al. (2020) aiming to assess the suitability of MSPSS among individuals with depression in prison, the study discovered an overall Cronbach's α for the scale as 0.93. Confirmatory factor analysis showed that the theorized three-factor solution for the MSPSS (i.e., significant other, family, and friends) provided a good fit for the data. The study recommended the use of MSPSS to measure perceived social support among incarcerated individuals.

In another study by Hochestetler, et al. (2010) titled social support and feelings of hostility among released inmates, the 3-item social support measure encompassed perceived

instrumental and expressive support in the offender's support network found Cronbach's α = .74 was coded in a direction where high scores indicated perceived lack of support. Ding, et al. (2018) conducted a study to investigate the efficacy of Naikan therapy on male offenders perceived social support and externalized blame. The study randomly selected 92 male offenders who were evaluated using the MSPSS and the results suggested that participants who received internal support showed higher levels of perceived social support and lower levels of externalized blame.

4.4. The study context

This study was conducted at the Durban Correctional Services situated in Westville. Westville is an area at the west of Durban, and a formerly independent town under eThekwini Municipality in KwaZulu Natal, South Africa. According to the Independent Development Plan (IDP, 2017/2018 annual report) the population is estimated to 3.7 million. Westville is situated 10 km inland from the Durban CBD and is also central to several main townships, namely Cato Manor, Clermont, and Chesterville. Westville is considered as one of Durban's wealthier suburbs with a high concentration of house break-ins (burglaries) and car hijackings. This has led to many streets in the suburbs being gated by private security companies.

Durban Correctional service in Westville is one of the largest correctional centres in South Africa and the only prison located in the Durban area (Naidoo & Mkize, 2012). The proposed study was located in this area because according to the Department of Correctional Service annual report (2017/2018), it housed the majority of female offenders' population in KwaZulu Natal (approximately 653 of 4316 female offenders in South African Correctional centres). This was approximately 15% of the female offenders' population in the country.

There has been a drastic increase in the population of offenders in the Durban correctional services to 8323 in 2024. The DCSC is an umbrella of three correctional centres including Umzinto correctional centre (784) and Durban Community corrections (Parolees) for both female and male offenders (2755). The DCSC alone houses 4672 offenders in four sub-centres. That is, Medium 3301 B (Maximum security male centre), Medium C 777 (Medium security male centre), Youth centre, 286 (male offenders) and Medium D 308 (female offenders). In these statistics, the awaiting detainees/remands are not included.

4.5. Population and sampling

Asiamah, Mensah and Oteng-Abayie (2017) emphasises the importance of properly understanding the connection amongst target, study and general population to avoid sampling biases and poor specification of the population. Thus, the population and the target (sample) of this study are discussed below.

4.5.1. Study population

A population is any group of individuals or objects that share the feature that the researcher wants to learn more about (Babbie & Mouton, 2009; Punch, 2014; Cresswell & Cresswell, 2014, 2018). Accordingly, Asiamah et al. (2017) describes a research population as the biggest possible participant group with a single interest-related feature (Asiamah et al, 2017). Thus, for this study the population are adult female offenders incarcerated at Durban correctional Services in Kwazulu-Natal Province of South Africa who have not been diagnosed of any of psychiatric illness. The female correctional centre in Durban accommodates both awaiting detainees and sentenced offenders. However, only female offenders in different sections form part of this study to allow generalisation and proportionate representation of all. According to Shishane (2020) the

female offenders in the correctional services centre (Medium D) constituted 405 of the total population of 2775 inmates in 5 centres of Durban correctional services.

Alternatively, during the time of the study (beginning of 2024), the general population of Durban Female correctional centre was 308 offenders (DCS, monthly statistics, February 2024) which counts for approximately 3.7% of the total population. The female correctional centre is divided into seven (7) sections. Maximum (C1, 11 year – life sentences), Medium (C2, 6-11 years sentences), Workers and Students (C3), Awaiting detainees (B2) and intermediate (B1, 0-5 years sentences), Hospital, and Mothers with children (A4) (Dlamini, Z., Personal interview, 2024). According to Asiamah et al. (2017) general population must be refined because including every person in the study could contradict its purpose, context and scope. Hence, the sample was carefully drawn from the larger population of female offenders to allow representation of all units.

4.5.2. *Sampling*

Sampling is "the researcher's unit of analysis that may be used to obtain information about a particular population for the purpose of the study" (Babbie & Mouton, 2018; Terre Blanche et al., 2014). A sample is a subset of people, things, or occurrences chosen from the population which is a bigger group (Neuman, 2014; Gay & Airasian, 2000). For quantitative research, Terre-Blanche et al. (2014) argue that in a "positivistic perspective a good sample enables researchers to make claims, expressed in terms of statistical probabilities about a population without having all the constituents that make up the population." This study adopted a multi-stage cluster probability proportional to size sampling method. Multi-stage cluster sampling can be understood as the combination of sampling techniques in the same study where the researcher follows different phases during sampling (Neuman, 2014).

In addition to multi-stage cluster sampling probability proportional to size and systematic random sampling strategy was employed. According to de Vos et al. (2011) cluster sampling takes at least "two stage procedure where a sample of clusters is firstly drawn and then a random sample of elements within each cluster is selected." Cluster sampling is the process of choosing people at random from clusters that either the researcher creates or naturally exist (Babbie, 2014). In this study, the female correctional centre had an existing list of clusters for sentenced female offenders. This sampling method aligns with Shishane et al., (2023) who indicates that each correctional centre has different clusters including female correctional centre. From the six sections in Medium D, clusters were purposively sampled to meet the requirements and ensure the reliability and validity of data to be collected. When engaging with the Development and Care officer in the centre, it was explained that there were four (4) sections (Clusters) that were illegible to be included in the study. The officer described Hospital as accommodating critically ill offenders and B1 accommodated offenders who are put under anti-depressants for a specific period. Hence, section B1 and the hospital were excluded in the study to prevent data from being compromised and to ensure validity as well as reliability of data.

The sample of this study was drawn from C1, C2 and C3 sections sentenced adult female offenders who had no records of known mental health disorder at the time of the study. This sample was recruited through multi-stage probability proportional to sizes of clusters to ensure that the parameters of the population from which the elements were selected were chosen closely to match (Terre-Blanche et al., 2014; Skinner, 2014; Neuman, 2014). In this study, the cluster sampling technique allowed for random sampling from a large, diversified population. The primary goal of cluster sampling is to increase sampling efficiency while lowering expenses (Dattalo, 2008). However, a challenge is that, though each subject in a cluster has an equal

probability of being chosen, there is a significant decrease in the likelihood that elements within big clusters will be included in the final sample. Therefore, this study's application of the probability proportional to size (PPS) technique decreased this error. PPS "takes into account the difference in cluster size and adjusts the chance that each subject in clusters will be selected" (Dattalo, 2008, p.5). That is, PPS increases the odds where elements in larger clusters are included in the study.

Systematic random sampling where participants were selected through an order frame (Babbie, 2014), was adopted. This approach starts by dividing the overall population size by the minimum required sample size, and then randomly choosing the Kth member from the list. Because of this method, every adult female offender from each category had an opportunity to be chosen using a multi-stage cluster sampling technique that combined systematic random selection from the lists that the centre provided.

4.5.3. *Recruitment process of the participants*

Participants were recruited through the social workers who served as a guide and responsible for research in the correctional centre. After receiving the full ethical approval, the researcher engaged with the DCS to discuss the processes applicable and accepted when engaging with female offenders for research purposes. When the arrangements and the plan were drafted and agreed upon, participants recruitment unfolded through the following steps:

Step 1: The researcher was provided with the list of all female offenders (sentenced) in the centre. The total female offender population at the time of the study was 335, where different clusters were identified and purposively selected from pre-existing population list in the centre (Medium D). The total population from each cluster was discovered: A4=13 (Mothers staying with children); B1=124 (Awaiting detainees/Inmates); C1= 84 (Maximum sentenced

offenders); C2=52 (Medium sentenced offenders); C3=49 (Workers) and hospital=14. In total the population size of female offenders on the time of data collection was 336.

Step 2: The researcher isolated ineligible clusters to participate in the study, and eligible individuals within each cluster (individuals above the age of 18), sentenced and not in psychiatric medication. The awaiting detainees, in-patients and under 18 years of age were excluded from this study to prevent the negative impact on reliability and validity of data collected. The correctional officer explained that, on entry, all offenders are put in psychiatric medication (anti-depressants) to alleviate their trauma and mental illness due to incarceration. Thus, 198 offenders were eligible to participate in the study.

Step 3: The minimum sample size for this study was determined using the systematic random probability proportional to size cluster sampling method using the sample proportion, margin of error (sample and population means), z-score, and total population. "The margin of error I is the maximum difference between the observed sample mean and true value of the population mean" μ which indicates the extent into which the results would differ from the total population value (Barlett, et al., 2001). The standard deviation tells us about the level of confidence in the representation of the population. According to Neuman (2003) larger population, the smaller the percentage and the smaller the population, the larger the percentage. De Vos et al (2011, p.224) adds that "if the population itself is relatively small, the sample should comprise a reasonably large percentage of it". That is, in a population size of 198 subjects, the minimum representation must be 32% (64 sample), hence in this study the sample size was calculated with the confidence level of 95% which yielded 132 minimum participants (66.67%).

$$n = \frac{N}{1 + N(e)^2}$$

N = population size,

n = determined size,

e = level of precision, 0.05.

Step 4: After determining the required minimum sample size, a systematic random sampling technique was applied in each cluster to determine the K^{th} term by dividing the cluster population with the total population eligible and multiplying the difference with the minimum sample size required. The researcher oversampled the minimum sample size required totalling an even value of 156. Oversampling assists when there are incomplete questionnaires that should be discarded to meet the minimum sample size.

4.5.4. Sample size determination

Sample size determination is a "technique of selecting an appropriate number of research participants to include in a statistical sample" (Singh & Masuku, 2014; Barlett, Kortlik & Higgins, 2001). It is an important feature for an empirical study to draw inferences about a population from where the sample comes. Terre-Blanche et al. (2014) clarify that a minimum sampling ratio of about 30% is required for a small population. Generally, the cost of gathering data and requirement for enough statistical power dictate the sample size that is utilised in each study (Singh and Masuku, 2014; Barlett, et al., 2001). The power base of the study "refers to the probability that the study precisely rejects the null hypothesis when it is false and 80% (.8) or more is an acceptable power for many studies" (Vishwakarma, 2017).

The sample size for this study was determined using the Yamane (1967) simplified formula also known as Slovin's formular for proportions and confirmed with the Krejcie and

Morgan (1970) sample size determination table. According to Yamane (1967) this formula is applicable when the researcher knows the population size of the study. The sample size determination formular that was used is:

$$n = \frac{N}{1 + N(e)^2}$$

N = population size,

n = determined size,

e = level of precision.

The total size for the female offender's population at Durban Correctional services female offenders' centre during the time of the study was 308 and 198 were eligible to studied. The offenders who were ineligible, and excluded for the study were those who were placed under anti-depressants medication because of being diagnosed with mental health disorder.

Adult female offenders

$$n = \frac{N}{1 + N(e)^2} = \frac{198}{1 + 198(0.05)^2} = \frac{198}{1.495} = 132$$

The sample represents all eligible clusters in the correctional female centre to allow generalisation of the results (Babbie, 2014). The above calculations show that the minimum sample size for the study from sentenced female offenders is 132. E^2 is a margin of error (precision) of ±5 that was adopted. This means that the sample mean varied from the true population mean with plus or minus five percent of error. N represents the number of female offenders' population, who were eligible to partake in this study and *n* represents the sample size. With reference to the sample size calculations, the representation of the population was 66.66% (67%). However, 156 (78.8%) adult female offenders participated in this study, which

allowed oversampling. During data processing and cleaning as well as surfing, one case had to be removed due to the incongruency of responses and the importance of the variable that was incomplete, which left the study with 155 valid questionnaires.

4.6. Methods and instruments of data collection

The collection of data is understood as the way in which information is elicited which is on a numerical form in quantitative research and discourses in qualitative research (Babbie & Mouton, 2018). According to Creswell (2014) collected data should be reliable and proper for statistical analysis. In this, a cross-sectional survey design as a data collection method was adopted with an aim to obtain reliable data at one point in time which produces strong conclusions and quickly determine the future research directions (Leavy, 2017). Data were collected in Durban correctional services, female centre. During the recruitment phase, the researcher provided a clear explanation on the nature, scope, and the aim of the study and those who were willing to be part of the study consented by collecting the questionnaire.

Leavy (2017) asserts that "informed consent is a crucial element of undertaking ethical research that include protection of human subjects." Participants were informed of their rights, benefits and possible risks when participating in the study prior to consenting to partake in the study. Participants were further informed that there were no monetary incentives involved for participating in the study and that their identification details would not be exposed. Furthermore, participants were informed that participating in the study had no effect or contribution to their sentences. As a result, participation was entirely voluntary and independent. The sample of the informed consent form is accessible as Appendix I attached in this document.

Data was collected face-to-face at a correctional facility, in a form of survey using a self-administered questionnaire. Self-administered questionnaire does not require a researcher to

complete it, however, the researcher was always available to assist where participants encounter challenges and to save time. There were few instances where the participants were illiterate but willing to participate. In such cases, the researcher administered the questionnaire on one-on-one basis where she read the questions out loud, and the participants chose the option that best described them in the provided list. Data were collected in February and March 2024 on Tuesdays and Thursdays as per the contact person and researcher's agreement. The participants were always prepared on arrival of the researcher.

4.6.1. Data collection instruments

The questionnaire took about 15-25 minutes to complete depending on the capacity and fluency of each participant to comprehend the questions. The questionnaire had both IsiZulu and English versions, as KwaZulu Natal is dominated by IsiZulu speaking people. However, the researcher was aware of the mixed ethnic groups incarceration, thus both English and IsiZulu versions were available for participants. The questionnaire's structure had five sections: Part A consists of demographics, Part B questions about suicidal ideation, Part C questions ask about depression, Part D asks questions about perceived social support and Part E asks questions about hopelessness. The variables were measured using the Beck Scale of Suicide Ideation_19 (BSSI_19) for Suicidal ideation, Hopkins Symptoms Checklist scale for depression (HSCL_15), The Multidimensional Scale of Perceived Social Support (MSPSS_12), and Beck's Hopelessness scale (BHS_20) to measure hopelessness (please SEE APPENDIX II). All scales were previously developed and have been validated in similar context even though not all has been used in South Africa as indicated under measurement section of research design.

4.6.2. Validity and Reliability of instruments

4.6.2.1. Analysis of Reliability

Reliability analysis can be understood as the assessment of the accurateness of the tools utilised for data collection in the research project. Babbie and Rubin (2012) emphasize that for the results to be regarded as valid, the measuring instruments should be reliable. Reliability implies consistency, which is "a matter of whether a particular technique applied repeatedly to the same object would yield the same results each time" (Babbie & Mouton, 2018, p. 119). According to Babbie and Rubin (2012), reliability analysis "measures the proportion of the accurate variance to the total of the obtained variance of the data relating to the amount of random error in a measurement." That is, random errors become less when the measures are more reliable. The Cronbach's Alpha is used to quantify the dependability of data collection tool and average intercorrelation between its items (Babbie & Rubin, 2010; Pallant, 2007). Reliability can be understood as an "extent to which results are consistent over time and accurate representation of population under the study and if the results of the study can be reproduced under a similar methodology" (Golafshani, 2003, p.597). Reliability of data collection tools in quantitative research is identified in three categories (Kirk & Miller, 1986). First, the consistency with which a measurement is made throughout time. The stability of a measurement throughout time is the second factor, and similarity of measurements inside a specific time is the third. Thus, the use of previously reliability proven measures is recommended. Cronbach's Alpha procedure argue that the scale should have a coefficient threshold of .70 to be reliable (Cronbach, 1951).

4.6.2.1.1. Reliability of the central study measures

Bartlett and Frost (2008) add that "the reliability of measurement process is also determined by the heterogeneity of the population in which measurements are done." Bartlett and Frost (2008)

mention different types of reliability of measurements: test-retest reliability (measure that generate high consistent outcomes throughout time under comparable circumstances); and inter-rater reliability (measure that yields comparable results when utilised by several researchers in various periods). In this study, the suicidal ideation, hopelessness, depression, and social support scales that have been previously used in the similar field and proven to be reliable was used. All measuring scales were proven to be reliable in this study. The Beck scale of suicidal ideation has 19 items and had a reliability of .862, depression measuring scale (Hopkins Symptom Linkert scale) with 15 items had a reliability of .885, multidimensional scale of perceived social support had 12 items with a reliability of .847 and the Beck hopelessness scale had 20 items with a reliability of .903. However, BHS-20, 10 items were reverse coded for its items to measure what it intended to measure. Table 1 displays the primary study measures' reliability statistics.

Table 1. Central study measures' reliability coefficients

Name of the scale	Number of Items	Cronbach's Alpha α
Beck's scale of Suicidal Ideation	19	.862
Beck's scale of Suicidal Ideation (Screening)	1-5	.972
Beck's scale of Suicidal Ideation (Ideation & preparation)	6-19	.783
Hopkins Symptoms Checklist scale	15	.885
Multidimensional Scale of Perceived Social Support	12	.847
Beck's Hopelessness scale	20	.903

Table 1.1 Reliability analysis to measure the items of suicidal ideation scale (BSSI)

BSSI	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Will to live	17,44	33,568	,693	,846
2. Wish to die	17,31	34,166	,579	,851
3. Reasons for living	17,28	32,734	,723	,844

4. Desire to make active suicide attempts	17,31	33,008	,653	,847
5. Passive suicidal desire	17,21	34,588	,490	,855
6. Time dimension: duration of suicidal ideation	17,62	36,664	,281	,862
7. Time dimension: frequency of suicide	17,62	34,348	,588	,851
8. Attitude towards ideation/wish	17,44	34,147	,607	,850
9. Control over suicidal action/acting out wish	17,51	34,835	,566	,852
10. Deterrents to active attempt (e.g. family, religion, friends, irreversibility)	17,46	35,518	,422	,857
11. Reason for contemplated attempt	17,41	36,090	,348	,860
12. Method: specificity/opportunity for contemplated attempt	18,08	35,547	,415	,858
13. Method: availability/opportunity for contemplate attempt	18,03	34,762	,399	,860
14. Sense of capability to carry out attempt	17,41	34,143	,590	,850
15. Expectancy/anticipation of actual attempt	17,23	33,498	,695	,846
16. Actual preparation for contemplate attempt	18,23	37,445	,179	,866
17. Suicide note	18,31	37,271	,262	,862
18. Final acts of anticipation of death (e.g. Insurance, will, etc)	17,77	38,287	,029	,873
19. Deception/concealment of contemplate suicide	17,51	37,520	,177	,865

Table 1.2. Scale: Hopkins Symptoms Checklist (Depression) Reliability Analysis

Question	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
11. Feeling low in energy, slowed down	40.21	88.716	.630	.874
12. Blaming yourself for things	39.88	92.725	.459	.881
13. Crying easily	40.12	94.663	.309	.888
14. Loss of sexual interest or pleasure	40.28	90.744	.456	.882
15. Poor appetite/Overeating	40.17	91.685	.452	.882
16. Difficulty falling sleep or staying asleep	40.06	87.760	.633	.874
17. Feeling hopeless about the future	40.50	86.679	.623	.874

18. Feeling sad	39.87	89.626	.639	.874
19. Feeling lonely	40.10	90.975	.501	.879
20. Thoughts of ending your life	41.19	88.506	.585	.876
21. Feeling of being trapped or caught	40.48	88.869	.617	.874
22. Worrying too much about things	39.81	93.302	.439	.882
23. Feeling no interest in things	40.29	90.033	.535	.878
24. Feeling everything is an effort	40.09	91.170	.549	.877
25. Feelings of worthlessness, feeling like a failure	40.22	89.549	.998	.867

***Table 1.3. Reliability analysis item for multidimensional scale of perceived social support* (MSPSS)**

Questions	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. There is a special person who is around when I am in need	53.69	224.242	.581	.830
2. There is a special person with whom I can share my joys and sorrows	53.68	225.489	.579	.831
3. My family really tries to help me	53.14	230.716	.614	.830
4. I get emotional help and support I need from my family	53.24	227.907	.644	.828
5. I have a special person who is really a source of comfort to me	53.74	222.804	.588	.830
6. My friends really try to help me	54.64	227.436	.570	.832
7. I can count on my friends when things go wrong	54.79	230.048	.511	.835
8. I can talk about my problems with my family	52.98	226.642	.235	.876
9. I have friends with whom I can share my joys and sorrows	54.58	223.742	.588	.830

10. There is a special person in my life who cares about my feelings	53.61	222.160	.595	.829
11. My family is willing to help me make decisions	53.23	228.536	.599	.830
12. I can talk about my problems with my friends	54.85	231.361	.456	.839

Table 1.4. Reliability analysis items for Beck's Hopelessness Scale (BHS)

BHS reliability	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. I look forward to the future with hope and enthusiasm	6,5906	25,514	,730	,894
2. I might as well give up because there is nothing, I can do about making things better for myself	6,5302	24,967	,796	,892
3. When things are going badly, I am helped by knowing that they cannot stay that way forever	6,6846	26,988	,478	,901
4. I can't imagine what my life would be like in ten years	6,3087	27,418	,208	,908
5. I have enough time to accomplish the things I want to do	6,4362	25,167	,689	,895
6. In the future, I expect to succeed in what concerns me the most	6,5705	25,666	,669	,896
7. My future seems dark to me	6,4295	24,868	,752	,893
8. I happen to be particularly lucky, and I expect to get more of the good things in life than the average person	6,5705	25,666	,669	,896
9. I just can't get the breaks, and there's no reason I will in the future	6,4430	25,735	,568	,898
10. My past experiences have prepared me well for the future	6,7047	27,088	,488	,901
11. All I can see ahead of me is unpleasantness rather than pleasantness	6,4161	24,988	,720	,894
12. I don't expect to get what I really want	6,4161	31,055	-,463	,925

13. When I look ahead to the future, I expect that I will be happier than I am now	6,5101	25,076	,753	,893
14. Things just don't work out the way I want them to	6,0201	27,290	,307	,904
15. I have great faith in the future	6,4966	25,103	,737	,893
16. I never get what I want, so it's foolish to want anything	6,4430	25,505	,618	,897
17. It's very unlikely that I will get any real satisfaction in the future	6,3356	25,508	,593	,897
18. The future seems vague and uncertain to me	6,3826	25,184	,668	,895
19. I can look forward to more good times than bad times	6,6644	26,454	,596	,898
20. There's no use in really trying to get anything I want because I probably won't get it	6,4765	26,548	,407	,902

4.6.2.2. Piloting of the instruments

Pilot study according to Barker (2003, p.327) is the "procedure for testing and validating an instrument by administering it to a small group of participants from the intended population." Using a subsample of the target population, a pilot study further evaluates the feasibility of data collection measurements, participants' recruiting tactics chosen, and other protocols procedures (Zailinawati, Schattner & Mazza, 2006). Rubin and Babbie (2005) emphasise that "participants in a pilot study should not form part of the main inquiry as this step helps the researcher to finetune and debug the process of the smooth main inquiry". Bless et al. (2006, p.184) simplify pilot study as "a small study conducted prior a larger piece of research to determine whether methodology, sampling, instruments and analysis are adequate and appropriate".

Piloting in this study helped the researcher to acknowledge any ambiguous and the reliability of the scale being used. The piloting was further applied to help with identifying and addressing possible matters that would hinder the accomplishment of the study. The scales were

tested for their validity and have been previously used in quantitative research and with offenders. Even though the pilot findings may not be considered significant, the preliminary analysis is conducted to evaluate the tool's viability and effectiveness until the very end (Rothgeb, 2008).

Probability of the pilot study

The questionnaire was piloted with 10 of the female offenders in the female correctional centre who had the same characteristics but who were not be part of the study in February 2024. The participants who were part of the pilot study were from the same unit (Mothers with Children) within the centre who did not form part of the main study.

4.6.2.3. Pre-test of survey instrument

Pre-testing of the survey instruments is a significant component in quantitative research as it allows the researcher time to think things through and make necessary adjustments to the research tools before several mistakes start to show up later. De Vos et al. (2011) define pre-testing as a "method of validating a survey questionnaire (set of questions) on a very small subgroup of the general population." Deciding not to pretest the questionnaire poses potential serious risks of inaccurate data and measurement errors (Rothgeb, 2008). A draft of the questionnaire was pretested on five participants including both experienced (3 colleagues) and non-experienced (1 matriculated) and secondary school non-completed (1) respondents. The respondents were able to go through the questionnaire doing crosschecking and commenting on the format of the instrument. The pre-testing process was conducted in the same procedure that was followed for the main data collection. These pretesting respondents were more likely to pinpoint the problems and notice errors. The respondents also met the literacy level of the female offenders.

4.6.2.4. Forward and back-translation

The quality of the data collection tool translation is of equally important. According to Tyupa (2011) “forward translation is a procedure of converting a text of the survey instrument directly from the source into the target language version, while back-translation is a process whereby the translator translates the translated text back to its original language.” This process was completed through the approach of three proficient bilingual translators for IsiZulu and English who did the translation. Both documents were reviewed and compared with the original version especially the English questionnaire to pinpoint inconsistencies and errors which might threaten the gist. Therefore, before the formal data collection procedure began, errors and discrepancies detected were found were corrected.

4.7. Data management and analysis

Neuman (2014) define data management as an “act of dealing with data by collecting, checking, cleaning, coding, preserving, backing up and entering it into the computer software”. Electronic collected data is stored in a password locked folder in a computer in an SPSS program; and the hard copy questionnaires are kept in a lockable cabinet. During data analysis process, data is scrutinised, structured, cleansed, modelled, and transformed using a number of methods that combine several methodologies (Neuman, 2014). The hypothetical model of this study consists of two main variables, depression (independent) and suicidal ideation (dependent variable), and two predictor variables hopelessness (mediating variable) and social support (moderating variable). Data were analysed using specific codes for each item on the instrument with the use of SPSS-29 software programme for cleaning and manipulation of data. SPSS enables statistical computation with ease during data analysis (Mujis, 2010). For example, frequency distributions of all variables including demographic, independent, dependent and predictors in the study.

A set of regressions accompanied by theoretical models, factor analysis, cluster analysis, and chi-square test of independence used the test static. Statistical modelling of data for predictive rather than descriptive reasons was the primary emphasis of static analysis. The model consists of one predictor (depression to suicidal ideation), one mediator (hopelessness) and one moderator variable (social support). Prior main data analysis, the researcher did a quality check on data set to ensure the cleanliness and handling of data. Non-random and-random missing data was checked as missing data is unavoidable where participants can choose to or not to answer some questions in the questionnaire; and non-random missing data can substantially undermine the validity of the results (Tabachnick & Fidell, 2013). In order to identify any missing data for every variable, frequency and percentage distribution were used. Only few cases were eliminated due to incongruency and missing data for the study.

The results of the variables that were dichotomously coded were tested using Pearson's Chi-Square test, and the significance of the variables' predictions was evaluated using the logistic regression process. Grant (2017) asserts that "statistical rules and principles be used to manage data with respect to measurement characteristics to conduct fitting statistical strategies that would yield meaningful data interpretations." The percentage difference in the participants' sociodemographic traits was evaluated using the univariate statistics; bivariate regression assessed the correlation between depression and suicidal ideation analysis; and multivariate logistic regression including multiple regression to test the predictors of suicidal ideation among adult female offenders.

4.8. Ethical Considerations

When conducting research, it is important to consider some ethical principles (De Vos, et al., 2011). Punch (2014) defines ethics as "a set of principles suggested by an individual or group, that are broadly accepted and provide rules of conduct and behavioural expectations regarding the most correct conduct towards experimental subjects." The ethical conduct was noted to ensure the verification and authentication of this research. This included protection of human participants, informed consent, benefits, and risks for partaking in the study, voluntary participation and privacy, deception of participants, confidentiality and anonymity, competence and actions of investigators, and release or publication of findings. The ethical approval to conduct the study was applied for and obtained from the 'University of KwaZulu Natal Human Social Science Research Ethics Committee' (UKZN-HSSREC) and National Department of Correctional Services Research Ethics Applications Committee (DCS-REAC). See APPENDIX III, IV and V.

4.8.1. Human participant's protection

Punch (2014) asserts that access to a research setting needs to be considered. Therefore, application for an approval to conduct a study is normally negotiated with relevant gatekeepers, and "responsible gatekeeping involves understanding research, sensitivity to the setting and care for participants." Thus, to minimize risks during research, the study undergone a full ethical approval application process of the UKZN, and Department of Correctional Services as well as the permission letter as a gatekeeper in the specific study domain. Endorsements and authorisation were received from the Durban Correctional Centre where participants were recruited.

4.8.2. Informed consent

To obtain informed consent, participants must be provided with sufficient information about the purpose of the study, the anticipated length of their involvement, the procedures that will be followed, the potential benefits, drawbacks, and risks to which they may be exposed as well as the reliability of the researcher (De Vos et al., 2011). Ahmad (2018) emphasises that this process should be continuous throughout.

The informed consent form and study questionnaire was shared with relevant management and the correctional officer responsible for development and care of offenders in the Durban correctional centre (Medium D) for screening and approval prior to the recruitment of participants. Then informed consent forms were also shared with the centre's contact person who facilitated the ethics process, and the researcher explained the purpose of the research and that participation was voluntary. The researcher further explained the length of participation, the goal of the study, the participants' rights during research, advantages, and risks which might occur when participating, who could access the material and how, and the chance to ask questions was provided before and after participating. The consent was confirmed by the offenders who came to collect the questionnaires.

4.8.3. Risks and benefits of participating in the study

The primary ethical guideline for research is that participants should not suffer any damage from it (Babbie, 2009; Babbie & Mouton, 2018). Both (either or) emotional and physical harm can take place during research process. Hence, it is of imperative for the researcher to minimise the risks, to carry out potentially beneficial and worthwhile work during the research project and beyond. There were no physical risks witnessed during this study. Emotional or psychological

risks to respondents is not always possible to anticipate and to control physical distress, but it regularly has more extensive costs for individuals (De Vos et al., 2005). Therefore, if and when such risks occur, participation would be terminated abruptly for that participant. Furthermore, Punch (2014) state that there may be different opinions about the likelihood and seriousness of risks amongst involved in the study.

The arrangements were made with the centre where research was conducted in dealing with any risks that might arise. For example, there were social workers and psychologist assigned at the female correctional centre of Durban Correctional Services. Therefore, whenever there is a breakdown and a need for consultation thereof, the social workers would be informed in advance for intervening measures to be put in place when needed. However, no harm was evident, reported or observed as a result of the study. Prior data collection, there was a formal meeting with the social worker who works with researchers at the centre, where all logistics and the questionnaire written in both isiZulu and English was discussed.

The generation of knowledge is the primary advantage of research (Babbie and Mouton, 2018). Therefore, written results will be submitted to the correctional centres for policy modifications and modified provision of services to offenders. Offenders were informed that there are no monetary or special benefit for participating in this study. There are no direct benefits for participants in this study. However, the interventions that may follow after the completion and influence of the study will benefit the offenders on provision of services, programs and the treatment of mentally challenged offenders specifically women.

4.8.4. Voluntary participation (Autonomy) and privacy.

Babbie and Mouton (2018) posit that "participation in research should always be voluntary and that no one should be forced into participating in a research study." Before beginning, the

participants were made aware of the purpose of the research project in order to guarantee their voluntary participation. Participation is voluntary and participants are not coerced to participate in the study, and they freely agreed to be part of the research, and that they understood the meaning of participation entails and the reporting method of results. Participants were informed that they could feel free to withdraw from participating at any time throughout the research process. By giving participants an opportunity to make informed decision about whether or not to engage in research, this ensures that participation was voluntary.

De Vos et al (2011) define privacy as something which is not normally intended for others to see and analyse. In this study privacy cannot be ensured as the condition of the institution demands inmates to be always in the eyes of the correctional services officers for safety purposes. However, to ensure privacy there were at a non-hearing distance between the correctional centre officials and the participants.

4.8.5. Deception of participants.

De Vos et al. (2011) define deception as the "deliberate withholding of information or offering incorrect information in order to ensure the participation of respondents when they would have possibly refused to participate." There was no participant deceit in this study as the goal of the investigation was clearly stated. For example, being identified as a researcher, so that inmates would not feel like they are being under the scrutiny of some sort. It was explained to the participants that participation to this study lied on their willingness to do so, and participation had nothing to do with their sentences or parole decisions made in the correctional centre and the department at large.

4.8.6. Anonymity and confidentiality.

4.8.6.1. Anonymity

Confidentiality refers to handling of information in a private manner where it has limited access to other people who do not own that information and anonymity is a process of making sure that the identities of respondents are not exposed (De Vos et al., 2011). Regarding the population, electronic coding and data storage, which complies with the strictest and most secure data encryption standards guaranteed anonymity. Furthermore, quantitative data analysis on SPSS uses codes that are numerical. Therefore, although the authorities might be aware of who participated in the study, they do not know who responded with what as participants were completing the survey and no interviews were conducted.

4.8.6.2.Confidentiality

Confidentiality in research is the process where an individual's responses are promised not to be given publicly, and the information given by the responded (Babbie and Mouton, 2018). The data collected is in a password coded folder that is only accessible to the researcher and the supervisor; and hard copies will be kept in a safe lockable cabinet for a period of five years and then will be destroyed by burning. The participants were assured that information gathered from them will not be transferred to correctional centre authorities as well.

4.9. Actions and competence of researchers.

Babbie and Mouton (2018) argue that "researchers are ethically obliged to make sure that they are competent, honest, and adequately skilled to conduct research." The investigator in this study is a competent Social Worker in possession of a master's degree in the same field. In addition to this, the investigator has previously conducted research, practiced in individual and group therapeutic counselling. She has further conducted research interviews, and as a result the

researcher was able to sensitively expand on the questionnaire and address questions and answers participants without making them to feel uncomfortable. The researcher has an experience of working in a similar setting with male inmates and offenders. Thus, the language and procedures when interacting with offenders as well as officials and within the premises was known to the researcher.

4.10. Releasing or publishing the findings.

In accordance with the department's guidelines and expectations, the final report will be printed and submitted to the National Department of Correctional Services before its publication. All the data, information and findings are accurate and authentic. The final report has all the required information and is concise and straight forward as recommended by De Vos et al. (2011).

4.11. Limitations of the study

Limitations are expected in all research studies that are specially conducted with human subjects, thus research should be carefully planned and clearly stated (De Vos et al., 2011). Strengths and delimitations of this study are discussed. As limitations, some participants were illiterate which posed a challenge on the self-administering purpose of the study. Thus, the researcher had to administer few of the questionnaires where she went through the whole document and the participants responded for the researcher to tick the chosen response. This process was time consuming as this process was facilitated with single participant at a time, but it acknowledged the rights of every willing offender to participate in this study without being discriminated against because of their demographic background. The language of the questionnaires had a potential limitation to two cases where participants could not understand English or IsiZulu but willing to participate. In such cases translators who were fluent in English that were

recommended by the participants and approved by the correctional centre officials were invited in to do the translation.

Furthermore, this study cannot be generalised in other correctional centres in other provinces of South Africa. However, since the location of the study houses the maximum number of female offenders in the country, data obtained in enough to make conclusions about the results. Offenders might have felt obliged to participate in the study and then provide socially desired responses and had missing data as they may had not fully participated voluntarily.

As part of the strengths, this study adds to the body of research that aims to close the gap by examining a phenomenon that has not thoroughly examined before among this group in South Africa. Secondly, a complex statistical method called SPSS was used to assess the data, enabling all variables to be looked at in a single model. Furthermore, data were collected from more than two third of the centre's population (156/198=78%), which allowed generalizability of the results in the Durban female correctional centre. Thus, the results presented in the next chapter (Chapter five) can be generalizable and trusted to represent the general population in the study's location.

CHAPTER 5

RESULTS

This chapter presents results of the quantitative research study which investigated the relationship between depression and suicidal ideation among incarcerated adult female offenders in a correctional facility in South Africa; and further examined the intervening roles of hopelessness and social support in the relationship between depression and suicidal ideation. This chapter further reports the results of the statistical analysis conducted in relation to the objectives and hypothesis tested. This chapter presents the descriptive and inferential findings.

5.1.Descriptive findings

Descriptive findings also called descriptive in quantitative research are the procedures that are used to describe and summarise data (Cronk, 2018). Univariate statistics are the type of information displayed in few words to describe basic feature of data in the study. These statistics include but not limited to frequencies, mean, median, mode, variance, standard error, range, percentiles, and standard deviation (Grey & Kinnear, 2012). One variable is analysed and presented in a single table or graph. The study was conducted in both IsiZulu and English because of the nature of participants in the research domain, hence, questionnaire was printed as IsiZulu language and English Language. The sum of participants who answered IsiZulu questionnaire were 69 (44.51%) and the English was answered by 86 participants (55.48%).

5.1.1. Socio-Demographic characteristics of the participants

This research was conducted in a female correctional centre with 155 participants who completed the questionnaire. Different demographics are presented in different figures as

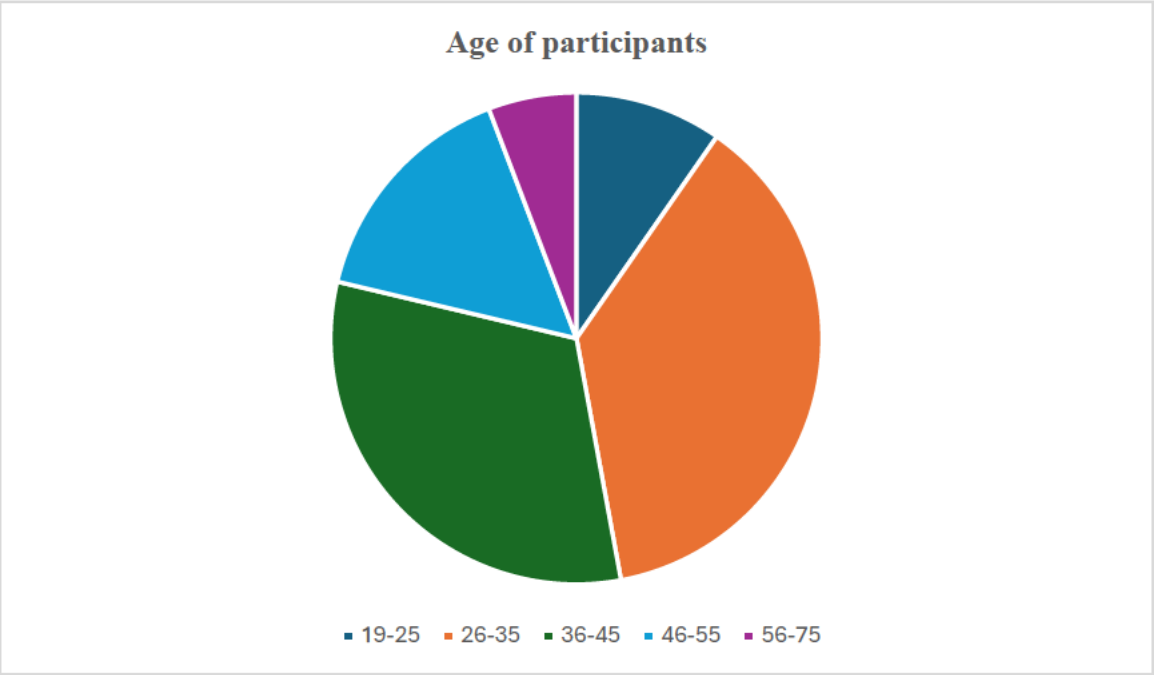
follows: Age (only); gender, population group and marital status (presented together in one table); level of education, number of biological children, and province of birth employment (presented in one table); status prior incarceration, type of offence, history of incarceration, and incarceration sentences are also presented together. Table 2 provides the summary of age statistics for participants, and Figure 4 provides the summary of the age distribution among participants.

The mean age as shown in the graph was 37.81 [(standard deviation (SD) 10.720] with a range of 19 to 75 years, the mode age was 43 with range of 56 and the median age was 36.00. The age groups by percentage were calculated as categories 19-25 years 10.26% (n=16), 26-35 years 37.17 % (n=58), 36-45 years 31.4% (n=49), 46-55 years 15.3% (n=24) and 56-75 years 5.6% (n=9). Most participants ranged between the ages of 26-35 with 37.17%. Please see the summary in Table 2 below.

Table 2. Age of participants

Statistics		
Age of Participants		
N	Valid	155
	Missing	0
Mean		37,80
Std. Error of Mean		,864
Median		36,00
Mode		43
Std. Deviation		10,754
Variance		115,655
Range		56
Minimum		19
Maximum		75
Sum		5859

Figure 4. Age of participants



5.1.2. Socio-demographic characteristics of participants: Gender, Level of formal education and population groups

The study was conducted in a female only correctional centre. In terms of gender as the study was conducted in a female correctional centre, it was expected that a significant number of participants would be female. In consideration of gender differences and identification, different options with regards to how offenders identify themselves were provided. Thus, those who identified themselves as females (n=145; 92.9%), other (n=5; 3.2%) and those who preferred not to say (n=6; 3.8%). In terms of the level of formal education, most participants appeared to be literacy advanced when asked of their level of formal education. The majority have completed secondary education (n=82; 52.6%), followed by tertiary education (n=62; 39.7), primary education (n=8; 5.1%) and only a small number of participants who have not received any form of formal education (n=4; 2.6%). The race of the participants appeared as expected in KwaZulu Natal province where Blacks dominate the province. The majority of participants described

themselves as Black (n=124; 79%), Coloured (n=15; 9,6%), White (n=3; 1.9%) and Indian/Asian (n=14; 9.0%). Please see table 3.

Table 3. Socio-demographic characteristics of participants: Gender, Level of formal education, and population groups

VARIABLE		Frequency	%
Gender of respondent (n=155)	Male	0	0
	Female	145	92,9%
	Other	5	3,2%
	Prefer not to say	6	3,8%
Highest level of formal education (n=155)			
	No education	4	2,6%
	Primary education	8	5,1%
	Secondary education	82	52,6%
	Post-secondary education	62	39,7%
Population group (n=155)			
	Black	124	79,5%
	Coloured	15	9,6%
	White	3	1,9%
	Indian/Asian	14	9,0%

5.1.3. Participants' marital status and the number of biological children

Table 4 provides the summary of the participants' marital status and the number of biological children one has. Most participants reported never married n=61 (39%), followed by married n=38 (24.4%), widowed was at the top 3 with n=26 (16.7%), divorced n=23 (14.7%), cohabitation n=4 (2.6%) and separated n=4 (2.6%). The majority of participants reported to have biological children 91% (n=146) and only 9% (n=14) did not have any biological child. These

results were categorised into four: 0-1 biological child (n=41; 26.7%), 2-3 biological children (n=85; 54.8%), 4-5 biological children (n=23; 14.8%), more than 5 biological children (n=6; 3.8%). Please see the summary in Table 4.

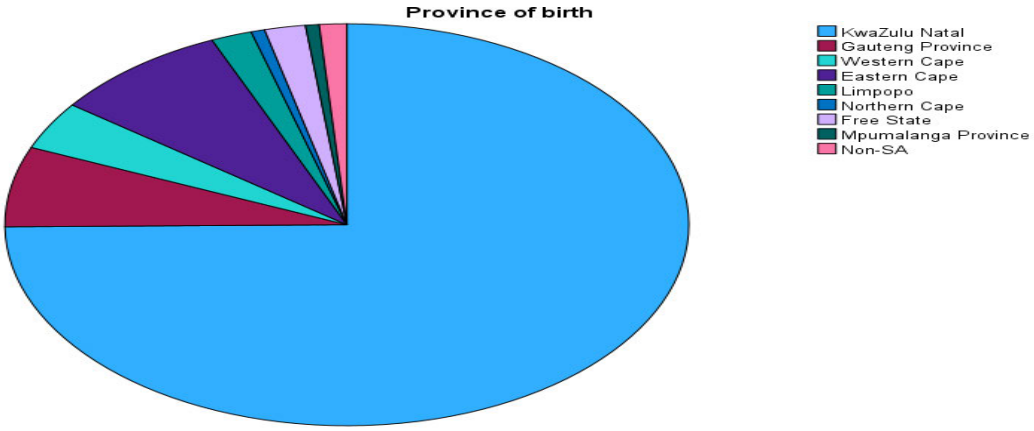
Table 4. Participants marital status and number of biological children

Variable		Frequency	%
Marital status	Married	38	24,4%
	Never married	61	39,1%
	Divorced	23	14,7%
	Widowed	26	16,7%
	Cohabitation	4	2,6%
	Separated	4	2,6%
Number of biological children	0-1	41	26.7
	2-3	85	54.7
	4-5	23	14.8
	5+	6	3.8

5.1.4. Participants' province of birth

Most participants indicated that they are from KwaZulu Natal as their province of origin. This was expected since the study was conducted in this province and the Department of Correctional Services mostly incarcerate offenders near their families and relatives so that the relationship between them is not compromised. Thus, Figure 3 describes the participants (n=155) population by province of origin, as per the location of the study, the majority of participants were from KwaZulu Natal (74.8%; n=116), followed by Eastern Cape (8.4%; n=13), Gauteng province (n=10; 6.5%), Western Cape (n=6; 4.5%); come from Limpopo (1.9%; n=3), comes from the Free State (1.9%; n=3), originates from Northern Cape0.6% (n=1; 0.6%1), from Mpumalanga (n=1; 0.6%), and 1.3% (n=2) are non-South Africans (Non-SA). Please see figure 3.

Figure 5. Participants' provincial distribution



5.1.5. Participants' criminal and incarceration information

Most of the participants responded that they were employed prior incarceration. More than two-thirds of participants reported to have been working prior incarceration (n=102; 65.4%) and reported to not have been working prior incarceration (n=54; 34.6%). To different crimes that they were charged for by the criminal justice system. The predominant crimes committed by female offenders are murder n=58 (37.2%), Fraud n=36 (23.1%), assault n=29 (18.6), Drug offence n=10 (6.4%), Other n=9 (5.8%) included crimes such as parole break, child neglect, possession of stolen property, destruction of infrastructure and theft. Moreover, economic n=6 (3.8%), robbery n=4 (2.6%), sexual offence n=2 (1.3%), manslaughter and drunk driving had 1 participant each (0.6%). The responses on the history of offence reveal that n=33 (21.2%) participants were incarcerated for the previous offence which indicates a component of recidivism, first time being incarcerated were n=41 (26.3%), first time offence n=25 (16.0%) and incarcerated for the current offence n=57 (36.5%). Please see the summary in Table 5.

Table 5. Participants' employment status prior to incarceration, type, history, and sentences of offence

Employment prior incarceration		**Frequency**	**%**
	No	54	34,6

	Yes	102	65,4
	Fraud	36	23,2
Type of offence respondent charged			
	drugs offence	10	6,5
	Robbery	4	2,6
	Murder	58	37,4
	Assault	28	18,1
	economic	6	3,9
	Sexual offence	2	1,3
	drunk driving	1	0,6
	manslaughter	1	0,6
	Other	9	5,8
	First time offence	25	16,0
Offending history			
	First time incarceration	41	26,3
	Incarceration for the current offence	57	36,5
	Incarceration for the previous offence	33	21,2
	Less than a year	5	3,2%
Maximum sentence period			
	1 – 5 years	38	24,4%
	6 – 10 years	52	33,3%
	More than 10 years	23	14,7%
	Life	38	24,4%

5.2.Descriptive findings of the study's central variables

Table 6 provides the summary of the descriptive analysis for the central variables, depression, suicidal ideation, social support and hopelessness where 155 participants completed the questionnaire.

Table 6. Descriptive statistics of the central study variables

	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation
Descriptive Statistics	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Std. Error**	**Statistic**
Suicidal ideation sum score	155	29,00	,00	29,00	755,00	4,8710	,69824	8,69297
Depression sum score	155	45,00	15,00	60,00	6647,71	42,8885	,80825	10,06261
Social Support sum score	155	75,00	11,00	86,00	9014,00	58,1548	1,34881	16,79252
BHS Sum Score	155	18,00	,00	18,00	1058,00	6,8258	,43043	5,35875
Valid N (listwise)	155							

5.3.Reliability of the study measurements

Reliability of measurements refers to the degree of which the same instrument provides a similar score when used repeatedly (Thyer, 2010). It also refers to the degree into which it the scale measures what it intends to inn the research study. In this study reliability was performed in SPSS. All measuring scales were proven to be reliable in this study. The Beck scale of suicidal ideation has 19 items and had a reliability of .862, depression measuring scale (Hopkins Symptom Linkert scale) with 15 items had a reliability of .885, multidimensional scale of perceived social support had 12 items with a reliability of .847 and the Beck hopelessness scale had 20 items with a reliability of .903. However, BHS-20, 10 items had to be reverse coded for

its items to measure what it intended to measure (hopelessness). Table 7 displays the primary study measures' reliability statistics.

Table 7. Reliability Statistics of the central study variables

Measurement	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Beck's Suicidal Ideation	.862	.857	19
Hopkins Symptom Checklist	.885	.892	15
Multidimensional scale of Perceived Social Support	.847	.869	12
Beck's Hopelessness Scale	.903	.907	20

5.4.Tests of Normality of the Central study variables

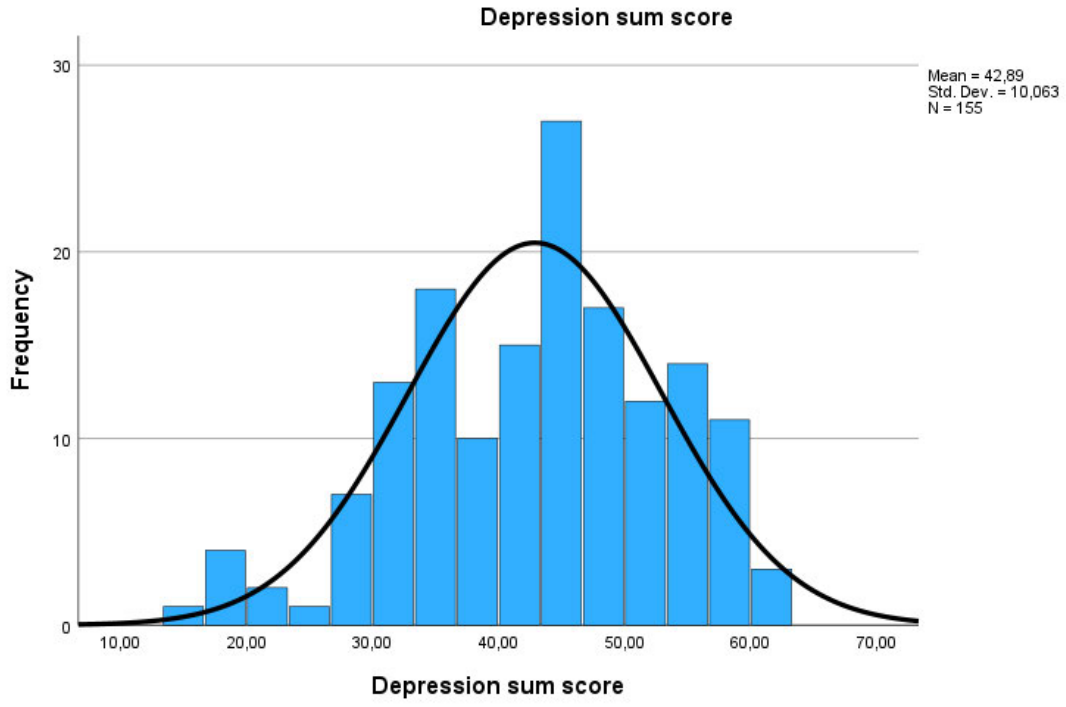
An assessment of normality (normality test of data) for all variables was performed. The assessment of normality is useful when determining the suitable statistical tests to run the distribution of data (Pallant, 2007; Ghasemi & Zahediasl, 2012). Normality data test is performed to enable the researcher to decide on the relevant statistics tests to use for the available data set. Ghasemi and Zahediasl (2012) assert that the values of Skewness and Kurtosis were adopted to test the normality of data with an application of the broadly used methods of normality, Kolmogorov-Smirnov test and Shapiro-Wilk test. Gray and Kinnear (2012) assert that Skewness measures the asymmetry of data distribution, where Kurtosis measures the degree to which observations peak around the central point. Shapiro-Wilk test was performed as it is the suitable normality test for data sample of >50 n <300.

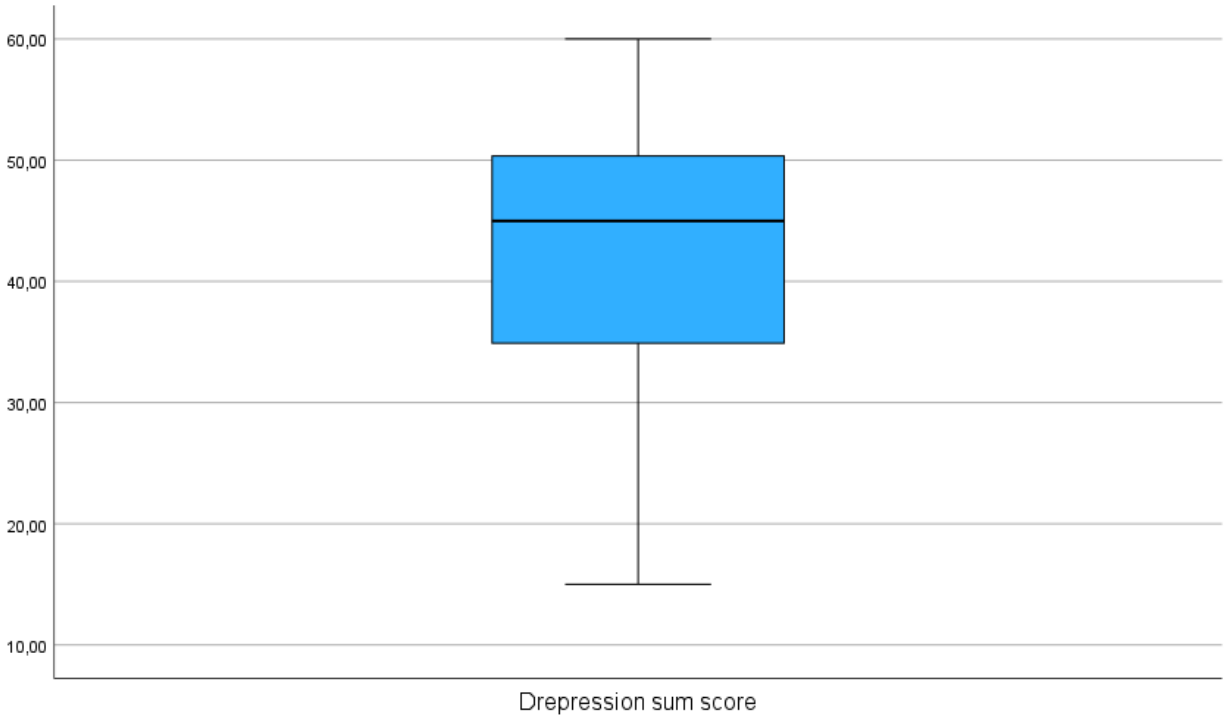
A distribution of data is normal if skewness or Kurtosis of data are between -1 and +1 (Ghasemi & Zahediasi, 2012). The current study normality tests were performed. Both Skewness and Kurtosis ranged between -1 and +1. For example, Depression Skewness= -.440 and Kurtosis = -.279; for Suicidal ideation skewness = -.503 and Kurtosis = .250; for hopelessness Skewness

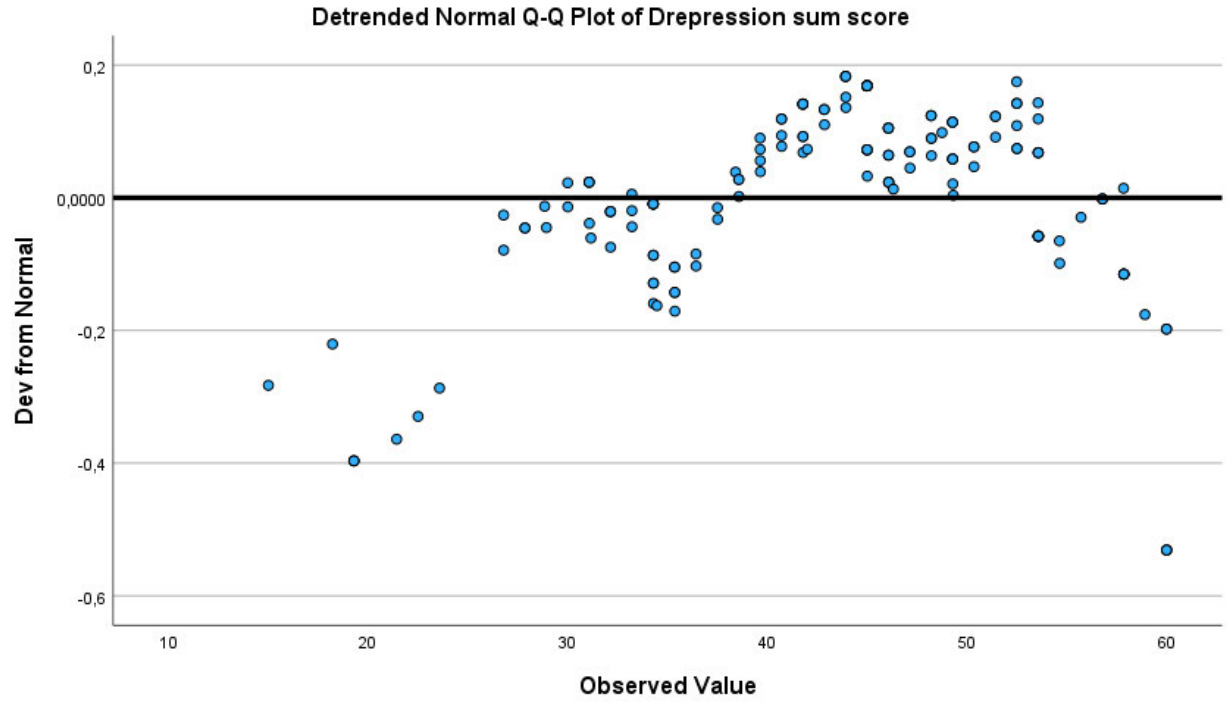
= .753 and Kurtosis = -.785; and Social Support's Skewness = -.494 and Kurtosis = -.166. The normality tests summaries are presented in both Table 8 and visual formats below.

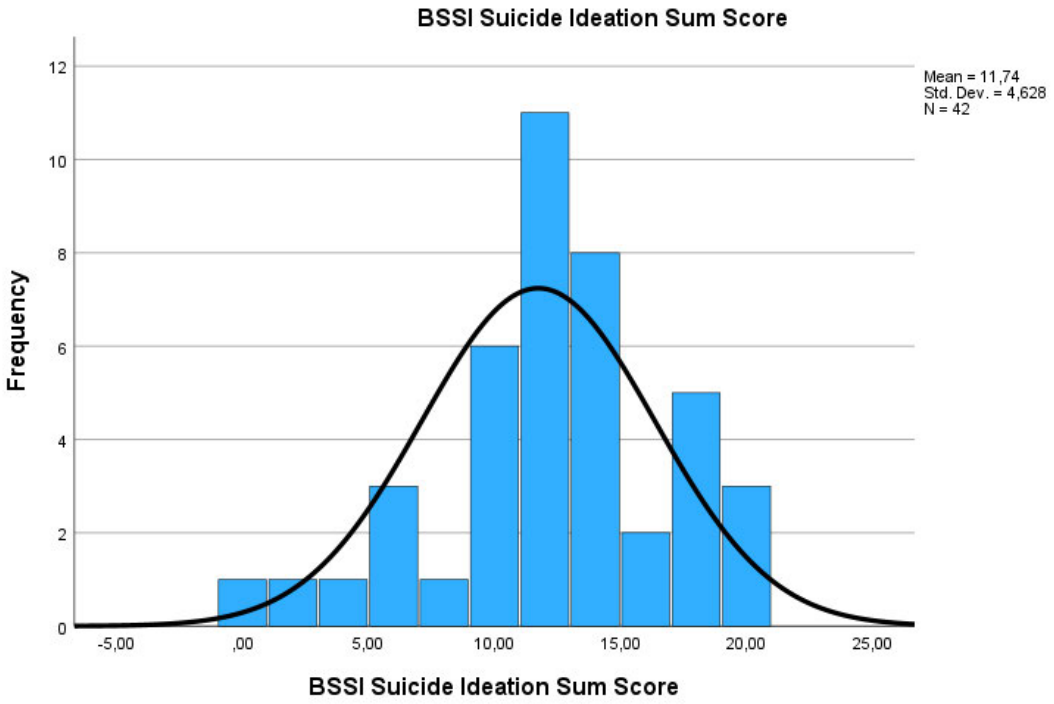
Table 8. Normality tests and histograms and Q-q plots

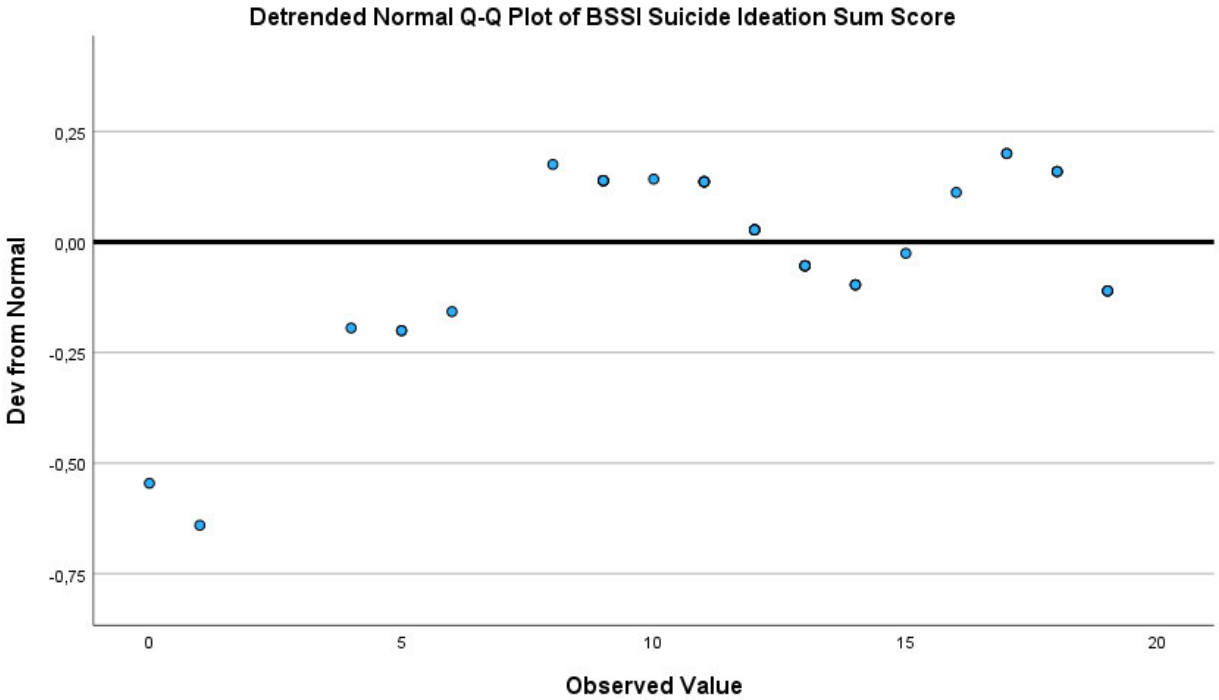
Normality Test Statistics		Depression Sum Score	BSSI Suicide Ideation Sum Score	Social Support sum score	BHS Sum Score
N	Valid	155	42	155	155
	Missing	0	113	0	0
Skewness		-,440	-,503	-,494	,753
Std. Error of Skewness		,195	,365	,195	,195
Kurtosis		-,279	,250	-,166	-,785
Std. Error of Kurtosis		,387	,717	,387	,387

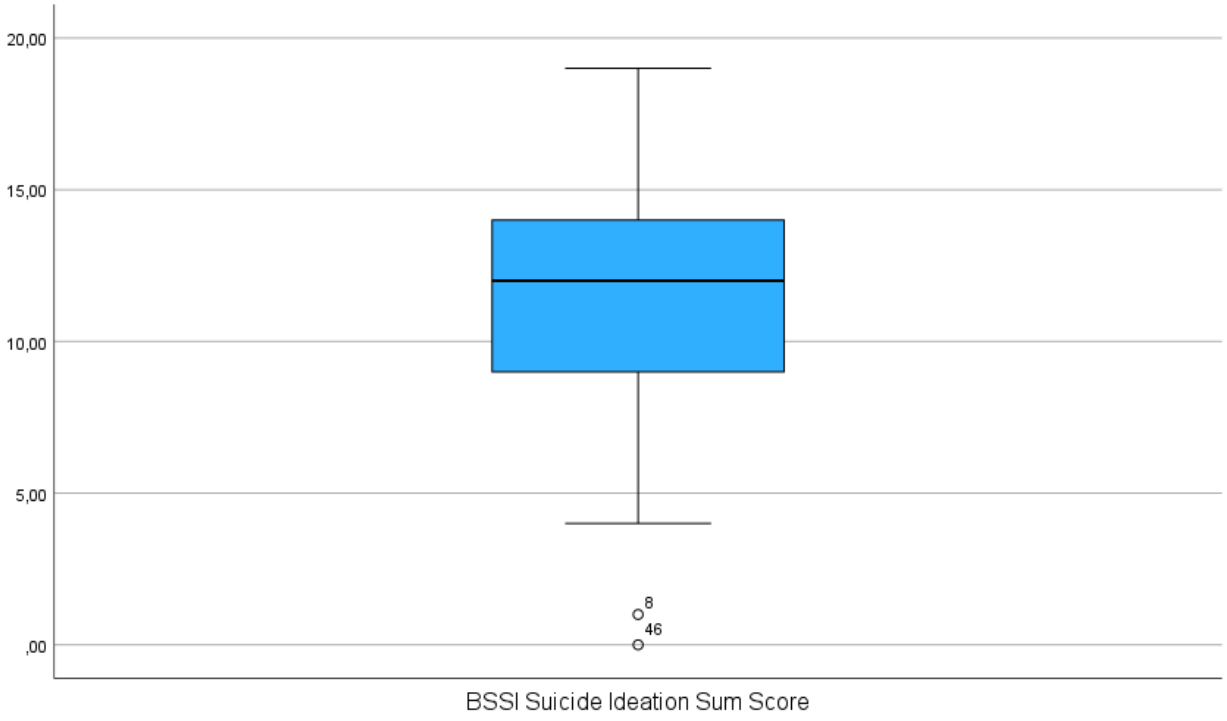


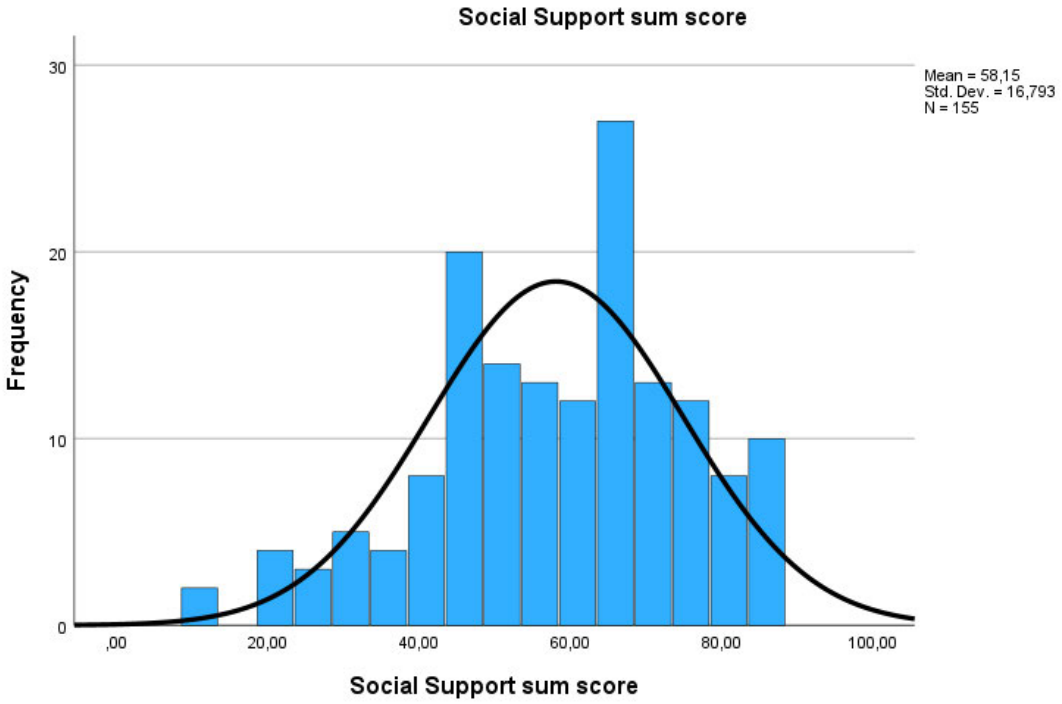

60,00
50,00
40,00
30,00
20,00
10,00
Drepression sum score

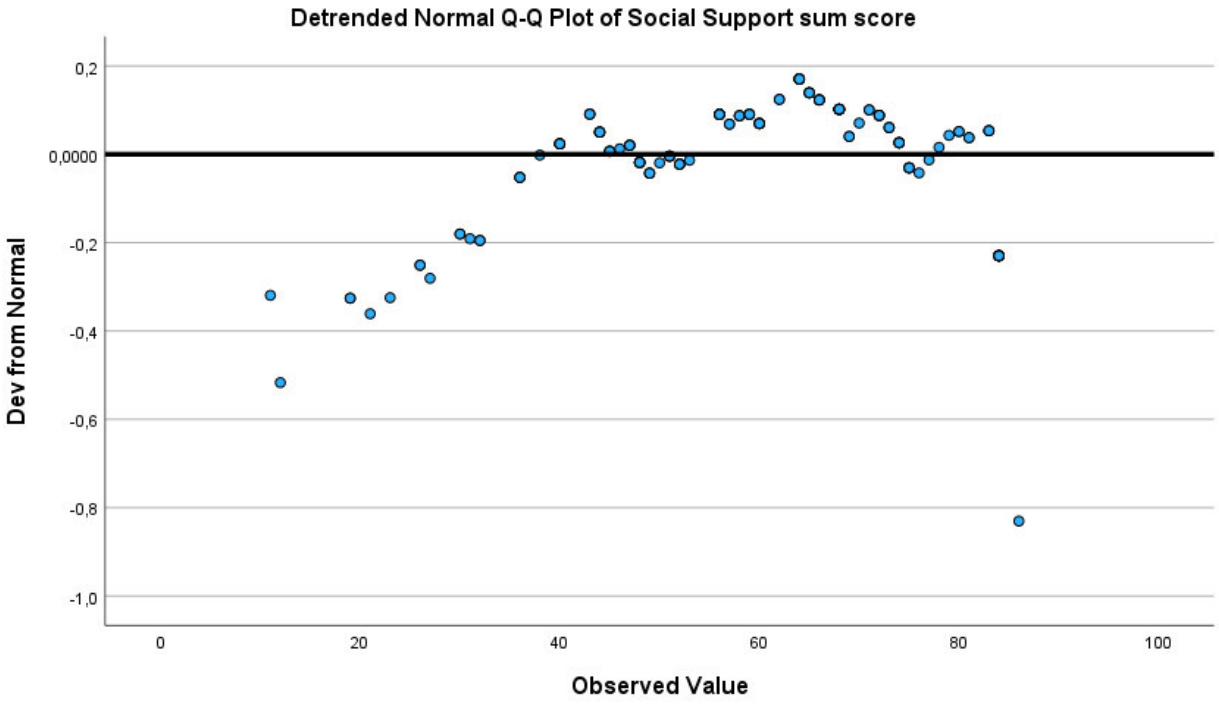

Detrended Normal Q-Q Plot of Drepression sum score
Dev from Normal
0,2
0,0000
-0,2
-0,4
-0,6
10
20
30
40
50
60
Observed Value

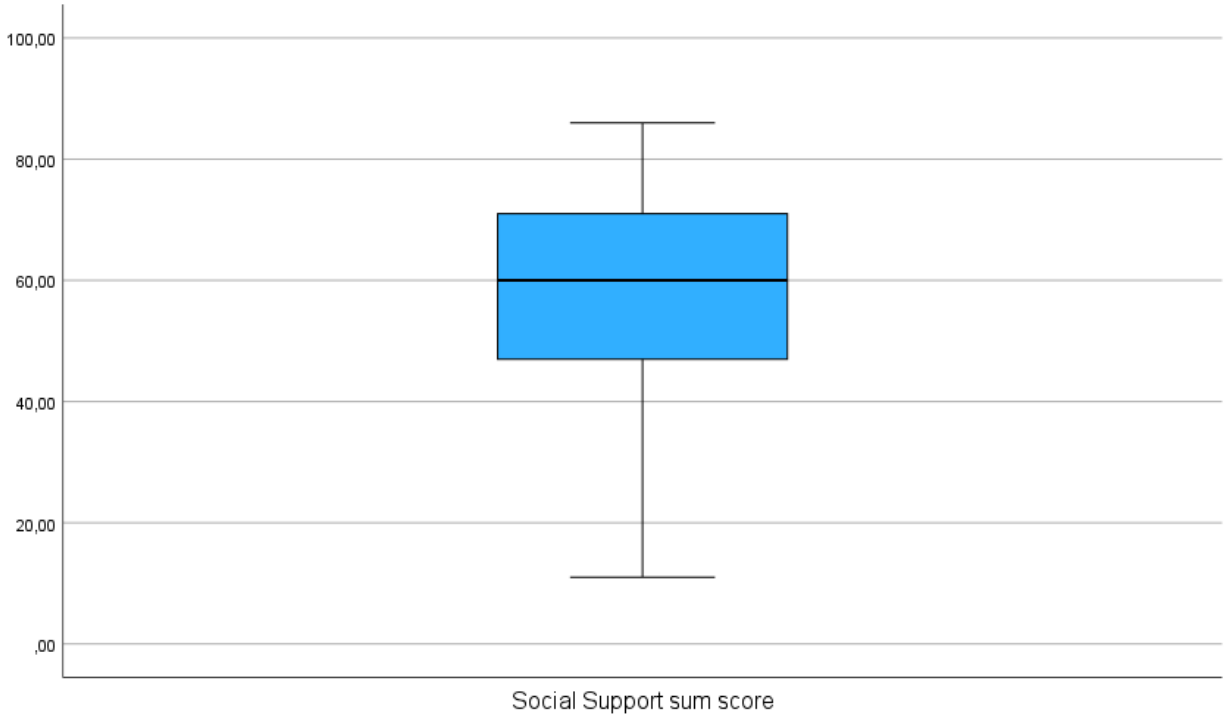

BSSI Suicide Ideation Sum Score
Mean = 11,74
Std. Dev. = 4,628
N = 42
Frequency
BSSI Suicide Ideation Sum Score

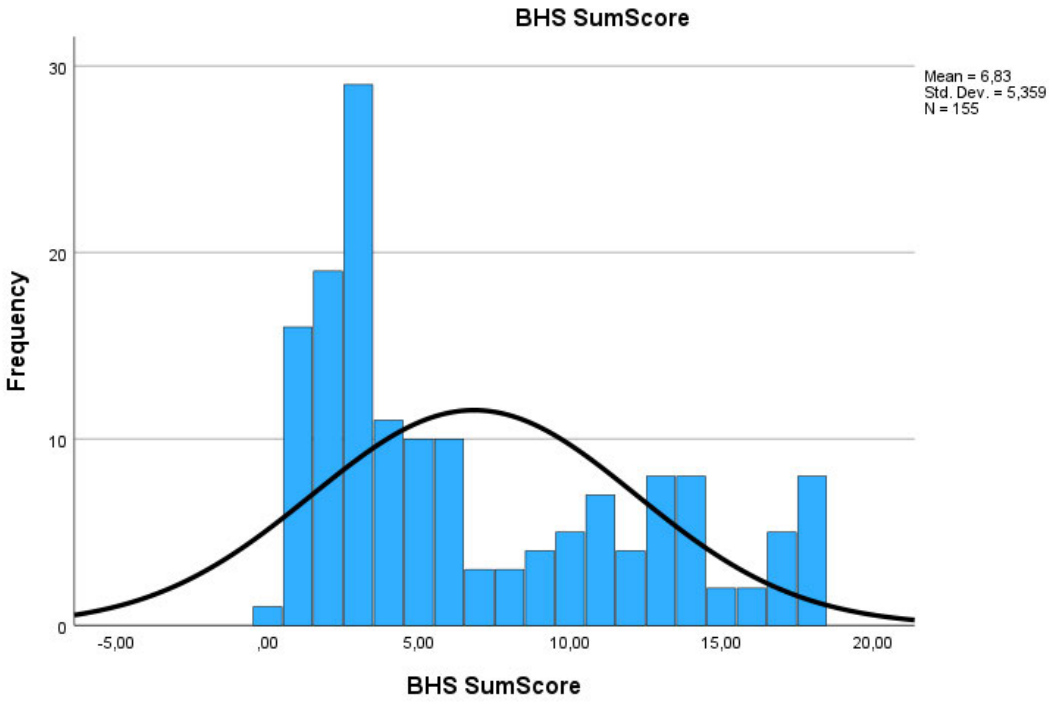

Detrended Normal Q-Q Plot of BSSI Suicide Ideation Sum Score
Dev from Normal
Observed Value

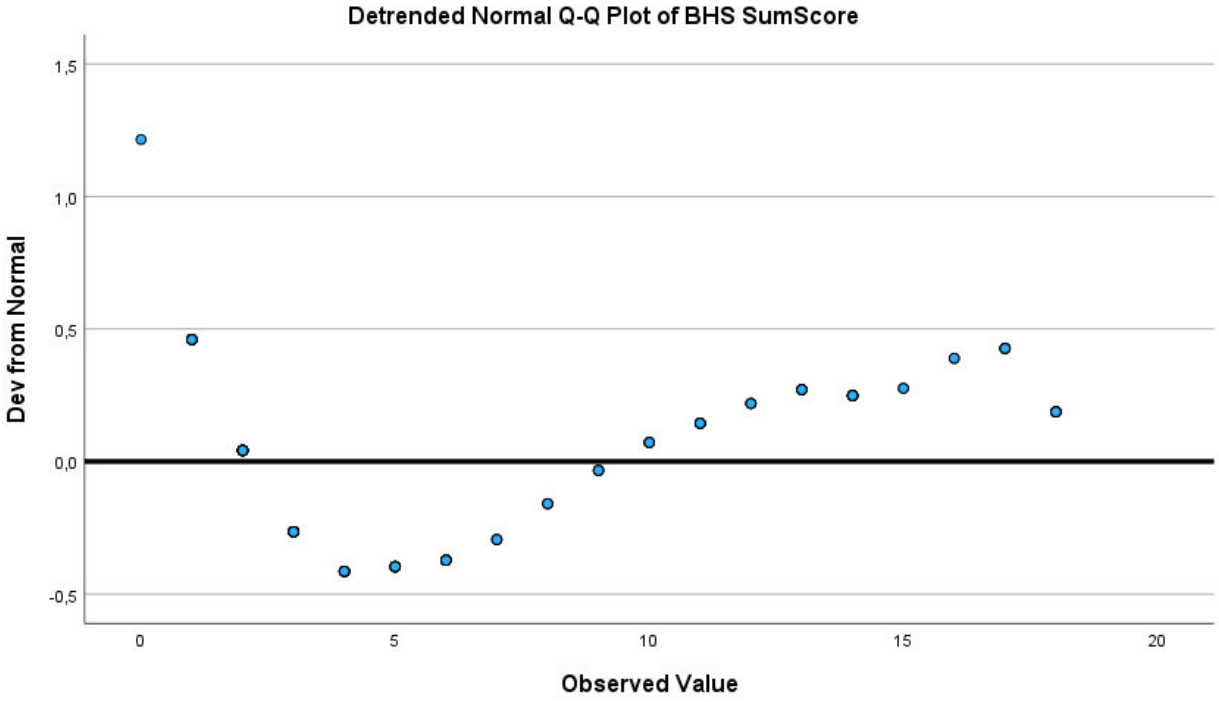

20,00
15,00
10,00
5,00
,00
8
46
BSSI Suicide Ideation Sum Score

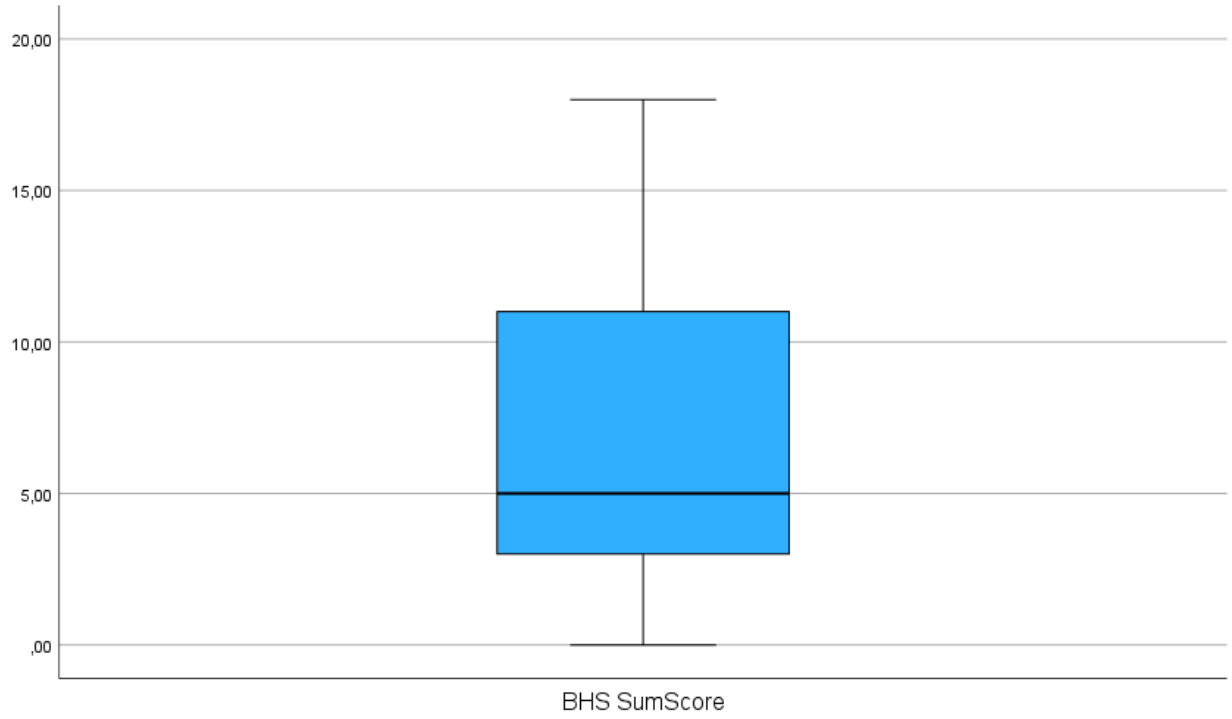

Social Support sum score
Mean = 58,15
Std. Dev. = 16,793
N = 155
Frequency
30
20
10
0
,00
20,00
40,00
60,00
80,00
100,00
Social Support sum score


Detrended Normal Q-Q Plot of Social Support sum score
Dev from Normal
0,2
0,0000
-0,2
-0,4
-0,6
-0,8
-1,0
0
20
40
60
80
100
Observed Value


100,00
80,00
60,00
40,00
20,00
,00
Social Support sum score


BHS SumScore
Mean = 6,83
Std. Dev. = 5,359
N = 155
Frequency
30
20
10
0
-5,00
,00
5,00
10,00
15,00
20,00
BHS SumScore


Detrended Normal Q-Q Plot of BHS SumScore
Dev from Normal
1,5
1,0
0,5
0,0
-0,5
0
5
10
15
20
Observed Value



5.5.Inferential Findings

Inferential statistics allows one to draw inferences about population based on samples of those populations. This means having the ability to make assumptions about the shape of the distribution of samples (Cronk, 2018). One of the research questions asks about the prevalence and correlates of depression and suicidal ideation among adult female offenders. This study aimed to answer three hypotheses. Firstly, depression predicts suicidal ideation among adult female offenders; Secondly, hopelessness mediates the relationship between depression and suicidal ideation and finally, social support moderates the relationship between depression and suicidal ideation. Firstly, the prevalence of the central variables among the participants was calculated and then the hypotheses were tested.

5.5.1. Prevalence and correlations of depression and suicidal ideation

RQ1. What are the prevalence and correlates of depression and suicidal ideation among adult female offenders? To answer this research question, the first part which examines the prevalence

of depression and suicidal ideation is reported separately as RQ1a, RQ1b and correlates between depression and suicidal ideation is reported as RQ1c.

5.5.1.1.Prevalence of depression symptomology

RQ1a. The prevalence of depression symptomology among female offenders is shown in Table 12. Depression was measured using the second 15 items of the Hopkins Symptoms Checklist (HSCL). Kleijn et al. (2001) state that the original scoring of HSCL_25 indicates that any participant who scores below the mean score of 1.75 is at low risk of depression symptomology and anyone above 1.75 mean score is symptomatic of depression. After depression was categorically recorded (0 = low risk depression and 1= high risk depression) and following this guide to precisely depict participants' symptomatic of depression, the findings revealed that n=8; 5.2% participants reported low risk of depression and n=147; 94.8% reported high risk depression symptomology. With reference to the above description, the female correctional centre has high risk of depression among adult female offenders with the prevalence of 94.8%. Please see the summary in Table 9 below.

Table 9. The prevalence of depression symptomology

Depression_mean1		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low risk	8	5,2	5,2	5,2
	high risk	147	94,8	94,8	100,0
	Total	155	100,0	100,0	

5.5.1.2.The prevalence of suicidal ideation

RQ1 (RQ1b) further seeks to examine the prevalence of suicidal ideation among female offenders. The table below describes the level of suicidal ideation among participants. This variable was measured with the Beck's Scale of Suicide Ideation (BSSI_19). As indicated above

that because of not following the normal data distribution, the level of each variable was measured using the median. However, after separation of the first 5 items of the scale which is a screening part, the 14 items (Suicidal ideation and attempt items) the data were normally distributed. Beck's scale of suicidal ideation does not have prescribed guideline on who can be said to be at risk of suicidal ideation. Thus, the median split was performed where the median was .0000. The scale ranged as 0,1,2.

The scale has two sections. The first five items of BSSI_19 served as a screening for suicidal ideation or suicidality. The first section of the BSSI presents five questions about the wish to die: 1) wish to live, 2) wish to die, 3) reasons to live, 4) wish to commit suicide, and 5) self-protection in case of a life-threatening event. In this first part, scoring 0 in the first five questions means the participant does not suicidal ideation. Thus, all participants answered first five items, screening section of the scale. If the participant responded with 1 or 2 in item 4 and 5, the participants should continue with answering the last 14 questions of the scale (section 2).

Section 2, with questions from 6 to 19, focuses on suicide ideation: 6) periods of suicide thoughts, 7) suicide thoughts, 8) acceptance of the suicide ideation, 9) control over committing suicide, 10) deterrents for suicide (such as family, friends), 11) reasons to commit suicide, 12) a specific plan of how to commit suicide, 13) accessibility to a method or specific opportunity to commit suicide, 14) courage or capability to commit suicide, 15) the wait to attempt suicide, 16) preparations to commit suicide, 17) a suicide note, 18) thoughts of what should be done after suicide, and 19) hiding the wish to commit suicide from people. Because of the nature of the measurement scale, everyone who scored above 1.5 had a high symptomology of suicidal ideation and everyone who scored below that had low to no symptom of suicidal ideation. Participants who scored above the median split were categorised as at risk. Table 10 shows that

n=44 (28.4 %) of participants had high symptoms of suicidal ideation and n=111 (71.6%) had low symptoms of suicidal ideation.

Table 10. The prevalence of Suicidal Ideation

Suicidal Ideation	Frequency	Percent	Valid Percent	Cumulative Percent
High Risk	44	28,4	28,4	28,4
Low Risk	111	71,6	71,6	100,0
Total	155	100,0	100,0	

Although the prevalence of the intervening variables was not one of the research questions, it was perceived important to also analyse the prevalence of social support and hopelessness among adult female offenders. These results are shown in Table 9 and Table 10.

5.5.1.3.The prevalence of Social Support

Table 11 describes the level of social support available for the participants. The social support was measured with use of Multidimensional scale of perceived social support (MSPSS_12). MSPSS is a 12-item scale that has three sections with four items each to measure support from family, friends and significant others (Zhang et al., 2018; Zimet et al., 1988). MSPSS is measured with a 7-point scale that range from 1 (very strongly disagree) to 7 (very strongly agree) with a total score range of 12-84. The availability of social support that an individual receives is measured by the higher mean score of the 12 items (Zhang et al. (2018). Thus, the mean score of social support among adult female offenders is 58.5762. Therefore, everyone who scored below the mean score was regarded as having low social support and everyone who scored above had have high social support level. When social support was coded into categorical dichotomous variable, 0=low prevalence and 1=High prevalence, to depict participant's level of social support while incarcerated, the results show n=85 (54.8%) participants with high social

support mechanisms and n=70 (45.2%) had low social support mechanisms. Please see the summary in Table 11.

Table 11. The prevalence of social support

Social Support		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low Social support	70	45,2	45,2	45,2
	High social support	85	54,8	54,8	100,0
	Total	155	100,0	100,0	

5.5.1.4.The prevalence of hopelessness

Table 12 summarises the level of hopelessness among the participants. The hopelessness was measured using the Beck's scale of Hopelessness (BHS_20). According to Beck and Steer (1988) the scoring for the prevalence of hopelessness has different categories: 0-3 normal range (coded as 1), 4-8 mild (coded as 2), 9-14 moderate (coded as 3) and above 14 is severe (coded as 4). In this study after categorising the responses as per this guide (1- 4), n=22 (14.2%) participants scored severe, n=35 (22.6%) scored under moderate range, n=36 (23.2%) scored under mild and n=62 (40%) scored normal range hopelessness score. It can thus be concluded that 60% of adult offenders' hope for the future is very limited or at risk. The rate of hopelessness among female offenders is 60%. Please see the summary in Table 12.

Table 12. The prevalence of Hopelessness

Hopelessness mean		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00 (normal)	62	40,0	40,0	40,0
	2,00 (mild)	36	23,2	23,2	63,2
	3,00 (moderate)	35	22,6	22,6	85,8
	4,00 (severe)	22	14,2	14,2	100,0
	Total	155	100,0	100,0	

5.6.Correlation of the Central Study variables

All measures of the central variables met the normality distribution. Thus, parametric tests were performed following the Pearsons *r* correlation order processes to examine the correlation among the study variables. Table 13 provides a summary of the correlations among all variables. The results show a significantly strong positive correlation between depression and suicidal ideation. A significantly strong positive correlation was also found between depression and hopelessness. Another significantly strong relationship was found between hopelessness and suicidal ideation. A significantly strong negative relationship was found between depression and social support. A negative relationship was found between social support and suicidal ideation and finally, a strong negative relationship was found between social support and hopelessness.

The Pearson correlation indicates that there was a significant positive correlation between Depression and suicidal ideation rs = .416, p<.001. Depression and hopelessness had a positive significant correlation with rs=.553, p. <.001. A significant negative correlation between Depression and Social Support *rs* = -.399, p<.001 was however discovered. Hopelessness shows significant positive correlation with Suicidal ideation rs=.765, p<.001. Hopelessness shows a significant negative correlation with social support at rs = -.564, p<.001. Social Support shows a significant negative correlation with Suicidal ideation at rs = -.553, p<.001. All variables show moderate significant correlate at a 99% Two-tailed confidence interval level. Please see the summary in Table 13 below.

Table 13. Correlation matrix among all variables

Pearson Correlations		Suicidal ideation sum score	Depression sum score	Social Support sum score	BHS Sum Score
Suicidal ideation sum score		1	,414**	-,553**	,765**
	N	155	155	155	155

Depression sum score		,414**	1	-,399**	,553**
	N	155	155	155	155
Social Support sum score		-,553**	-,399**	1	-,564**
	N	155	155	155	155
BHS Sum Score		,765**	,553**	-,564**	1
	N	155	155	155	155

**. Correlation is significant at the 0.01 level (2-tailed).

5.7.Correlations among predictor variables

The third component of the research question 1 (RQ1c) examined the correlates between depression and suicidal ideation. Correlation is a measure of the relationship between two variables (Pallant, 2007). According to Cronk (2018) Pearson correlation coefficient is a procedure used to determine the strength of the linear relationship between two variables. Correlation analyses does not determine the cause and effect of one variable to the other but the existence of a relationship among variables in the study (Pallant, 2007). It is also used to explore the relationship among a group of variables. The Pearson correlation coefficient analysis was performed for the relationship between depression and suicidal ideation among adult female offenders. A moderate positive correlation was found (r (155) = .416, p<.001) indicating a significant linear relationship between the two variables. Depressed participants tend to think about suicide. Please see the summary in Table 14.

Table 14. Correlations between predictor variables: depression and suicidal ideation

Correlations

		Depression sum score	Suicidal ideation sum score
Depression sum score	Pearson Correlation	1	,416**
	Sig. (2-tailed)		<,001
	N	155	155
Suicidal ideation sum score	Pearson Correlation	,416**	1
	Sig. (2-tailed)	<,001	
	N	155	155

**. Correlation is significant at the 0.01 level (2-tailed).

5.8.Regression Analysis the predictor variables

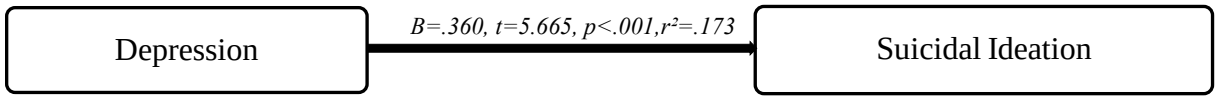
5.8.1. Simple Linear regression analysis of the relationship between depression and suicidal ideation

Simple linear regression allows the prediction of one variable from another (Cronk, 2018). The linear regression analysis was performed to determine the relationship between depression and suicidal ideation among adult female offenders. This analysis is performed through correlations among variables to describe the direction and strength of the linear relationship. The data met the assumptions of the linear regression. A simple linear regression was calculated to predict the participants' suicidal ideation based on their level of depression (RQ2: examined the relationship between depression and suicidal ideation among adult female offenders in a selected correctional facility). A significant regression equation was found ($F(1.153) = 32.095$, p=<.001), with an R^2 of .173. Participants' predicted suicidal ideation is equal to -10.557+.360 (Depression). Participants' average suicidal ideation increased by B=.357 every time depression increases.

With regards to Hypothesis 1(**Depression predicts suicidal ideation among adult female offenders**) test results show that depression indeed contribute significantly towards suicidal ideation among the adult female offenders. The increase of depression on adult female

offenders contributes the strength of 16% with the value of 32.059, degrees of freedom (1,153) and a significant level (p<.001) of the regression. Thus, depression is a significant predictor of suicidal ideation among the participants. Please see the summary in figure 4 and Table 8, a hypothesized model for H1.

Figure 6. Linear regression analysis of Depression predicts Suicidal Ideation



A simple linear regression was calculated to analyse if depression carries a significant impact on suicidal ideation. The dependent variable depression was regressed on predicting variable suicidal ideation to test the hypothesis 1. Depression significantly predicted depression, $F(1.154) = 32,095$, $p<.001$, which indicates that depression can play a significant role in shaping suicidal ideation (B=.360, $p<.001$). These results clearly direct the positive effect of depression on suicidal ideation. Moreover, the R^2 of .173 depicts that the model explains 17.3% of the variance in suicidal ideation.

Table 15. Linear regression test for impact of depression on suicidal ideation (Path C)

Hypothesis	Regression weights	Beta Coefficient	R^2	F	Sig.	t-value	Hypothesis supported
H1	HSCL→BSSI	.360	.173	32.095	<.001	5.665	Yes

a. *Note*. *p<0.05. HSCL: Depression, BSSI: Suicidal ideation

Moreover, a simple linear regression analysis was calculated to test the prediction effect of depression on hopelessness. The dependent variable hopelessness was regressed on predicting variable depression to test *Path A* of the hypothesised model. A significant regression was found

(F(1.153)= 67.352, P<.001) with an R^2 of .306. Participants' predicted hopelessness is equal to Hopelessness = -5.801+.294 (Depression). These results found direct positive impact of depression with 30.6% effect on hopelessness. Please see table 16.

Table 16. Simple linear regression analysis: impact of Depression on Hopelessness Path A

Hypothesis	Regression weights	Beta Coefficient	R^2	F	Sig.	t-value	Hypothesis supported
H1	HSCL→BHS	.294	.306	67.352	<.001	8.207	Yes

a. *Note*. *p<0.05. HSCL: Depression, BHS: Hopelessness

A simple linear regression was calculated to test the prediction effect of hopelessness on suicidal ideation, which is reported as *Path B* in figure 4. (F(1.153) = 215.216, p<.001) with an R^2 of .582 depicts that the model explains 58.2% of the variance in hopelessness. Participants' prediction of suicidal ideation is equal to 13.594 + 1.240 (Hopelessness) with increased level of suicidal ideation. These results clearly show that an increase level of hopelessness with a strength (58.2), value (215.216) degrees of freedom (1,153) and significant level (<.001) of the regression. Therefore, conclusions from regression analysis indicate that a significant prediction equation was obtained. Please see Table 17

Table 17. Simple linear regression analysis: impact of hopelessness on suicidal ideation PathB

Hypothesis	Regression weights	Beta Coefficient	R^2	F	Sig.	t-value	Hypothesis supported
H1	BHS→BSSI	1.240	.584	215.216	<.001	-4.906	Yes

a. *Note*. *p<0.05. BHS: Hopelessness, BSSI: Suicidal Ideation

Thus, multiple regression analysis was performed to test RQ3a, (to determine the intervening role of hopelessness on the relationship between depression and suicidal ideation) that is also

Hypothesis 2 (Hopelessness mediates the relationship between depression and suicidal ideation among adult female offenders) and this is described in the next section.

5.8.2. The Multiple linear regression matrix of the hypothesised model

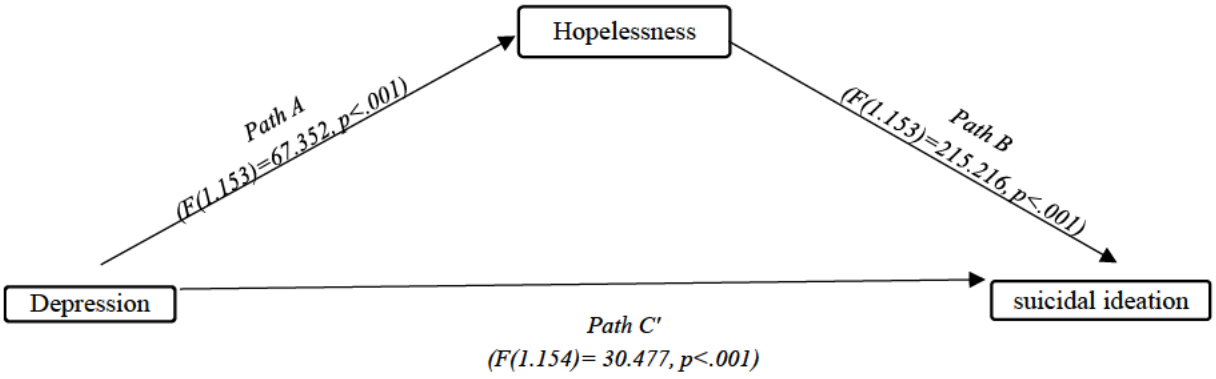
RQ3: Intervening roles of hopelessness and social support on the relationship between depression and suicidal ideation

Multiple linear regression analysis allows the prediction of one variable from several other variables (Cronk, 2018). A multiple linear regression was calculated to predict participants' suicidal ideation based on depression and hopelessness to respond to question 3a and hypothesis 2. RQ3a: What is the intervening role of hopelessness on the relationship between depression and suicidal ideation. (**H2: Hopelessness mediates the relationship between depression and suicidal ideation).** A multiple linear regression equation results significantly show positive and strong mediation in the relationship between the central study variables. A significant regression equation was found ($F(2,152)=-3.315$, $p<.001$), with an R^2 of .585. The results show that the participants' predicted suicidal ideation is equal to -3.315- 1.248 (hopelessness) + (-.008) (depression). Hopelessness is a significant predictor. Hopelessness has the mediation value of 58% on the relationship between depression and suicidal ideation. It was however noted that with addition of the second independent variable (hopelessness) in the equation (model), the Depression equation became non-significant in predicting suicidal ideation ($p>.05$). That is, ($F(2,152) =-.011$, $p>.005$ (.886).

The results reveal a significant indirect effect of hopelessness on the relationship between depression and suicidal ideation. Therefore, hopelessness has moderate mediating role on the relationship between depression and suicidal ideation. The effects are presented in path C' for direct effect between depression and suicidal ideation; path A represents the direct effect

between depression and hopelessness; path B represents the direct effect between hopelessness and suicidal ideation. The effect of depression towards hopelessness combined with the direct effect of hopelessness indicates whether there is mediation or not between the effect of independent variable. It can be concluded that hopelessness significantly and in part mediates the relationship between depression and suicidal ideation. The mediation analysis summary is presented in the hypothesised model in figure 7.

Figure 7. Path analytical model of the hypothesised mediator variable



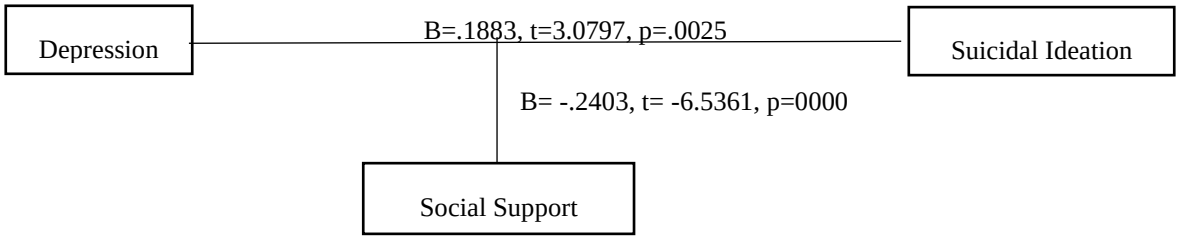
RQ3b: What is the intervening role of social support on the relationship between depression and suicidal ideation?

H3: Social support moderates the relationship between depression and suicidal ideation.

A multiple regression analysis was calculated to determine the relationship or contribution of social support in the relationship between depression and suicidal ideation. The results revealed $F(3,151) = 41.033$, $p<.001$, with the R^2 of .342. Social support was observed to significantly moderate the relationship between depression and suicidal ideation among adult female offenders. With the inclusion of social support in the model, the effect of depression towards suicidal ideation decreases. The intervening role of social support (Hypothesis 3: social support moderates the relationship between depression and suicidal ideation). The results revealed a

significantly negative moderation effect of social support in the relationship between depression and suicidal ideation. Thus, social support has a moderation role between depression and suicidal ideation.

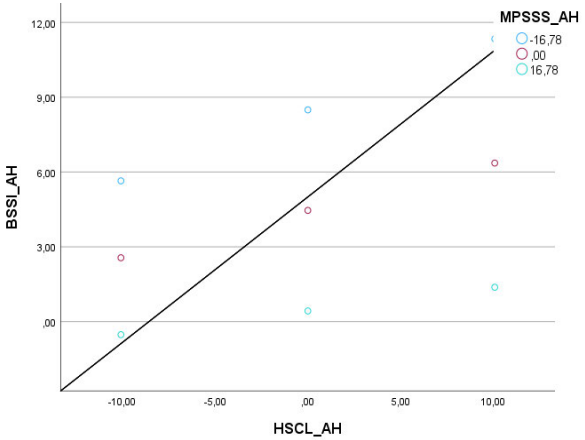
Figure 8. Summary result of moderator analysis

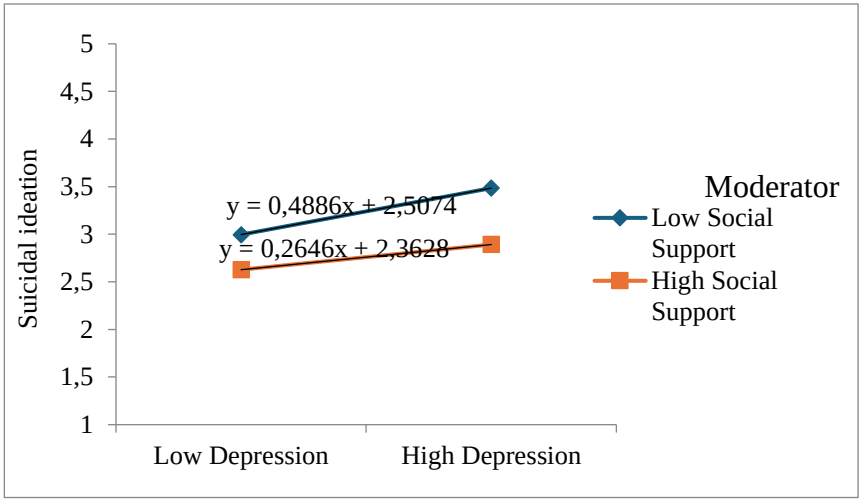


5.8.3. Data visualisation of simple slope analysis

The results of simple slope analysis conducted to understand the nature of moderating effects are shown in Figure 6. As can be seen in figure 9, the line is much steeper for low Social Support. This means that at Low level of social support, the impact of depression is much stronger in comparison to high social support level. Again, as the level of social support increased, the strength of the relationship between depression and suicidal ideation decreased. Thus, Social Support dampens the positive relationship between Depression and Suicidal ideation.

Figure 9. Unstandardized Regression Coefficients data visualisation





5.8.4. Analysis of the overall hypothetical model of the study

The multiple linear regression analysis was calculated to discover the direct correlation between depression and suicidal ideation. Spearman correlation (rho) procedures were followed for this study where data is not normally distributed (Pallant, 2007). Andrew Hayes Process Macro version 4.2 was used to test the intervening roles of social support on the relationship between depression and suicidal ideation. Depression predicts suicidal ideation (direct effect), depression predicts hopelessness (direct effect), hopelessness

partially mediates the relationship between depression and suicidal ideation (indirect mediating effect), social support moderates the relationship between depression and suicidal ideation (indirect moderation effect) and lastly the total effect of the independent and intervening variables towards and between the direct effect of the independent variable was tested.

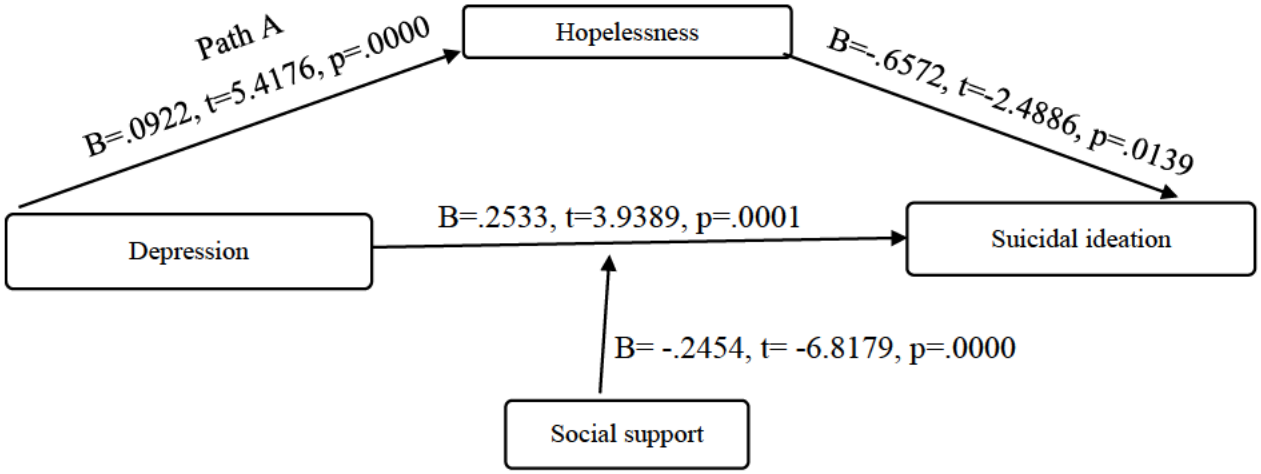
Simple linear regression was calculated to test hypothesis 1; multiple linear regression was calculated to test hypothesis 2; Model 1 and Model 5 was performed to test hypothesis 3 and to answer the main research question to investigate the relationship between depression and suicidal ideation, as well as to examine the intervening roles of hopelessness and social support between these variables. The results reveal a strong significant positive correlation between depression and suicidal ideation. The mediator influences the constructs between two variables. The coefficient test shows that depression significantly and positively predicts suicidal ideation (b=.0922; t=5.4176; p=.000) with the r-square value of .171 (16%). Direct effect of X on Y is significantly positive, (b=.4064, t=5.8973, p=.0000). Depression has a positive significant impact on Hopelessness with the r-quare value =.1886 (19%). The total effect of X on Y was significant, b=.3597, t=5.6652, p=.0000.

Figure 9 depict the moderating impact of Social Support in the relationship between depression and suicidal ideation. It reveals that on one hand less social support more depression and high prevalence of suicidal ideation. On the other hand, high social support level less depression and suicidal ideation prevalence. In relation to the graph (Figure 6), the blue line represents low level of social support (blue), the line is steeper compared to red and green. Red line represents the average level of social support which is also steeper. The bottom plots (green) represent high social support level and the lined plots drops on the right-hand side (straightens).

These results reveal that social support dampens the relationship between depression and suicidal ideation among adult female offenders.

The direct and indirect effects of the moderator and mediator in a complete model shows that social support and hopelessness have significant intervening roles in the relationship between depression and suicidal ideation among female offenders. Please see the summary in figure 10.

Figure 10. Path analytical model of the hypothesised central study variables



Conclusion

In summary, the results have shown that there is, to some extent, the presence of depression, hopelessness, suicidal ideation, and social support among adult female offenders. All four (4) measurement tools used in the study have proven to be reliable. That is, Beck's Scale of Suicidal Ideation .862, Hopkins Symptom Checklist .885, Multidimensional scale of Perceived Social Support .847, and Beck's Hopelessness Scale .903. The prevalence of each variable was tested and the findings show that 94.8% (n=147) of participants presented with depression symptomology. 28.2 % (n=44) of 156 participants presented with suicidal ideation

symptomology, 50.3% (n=78) of participants presented with low social support from either friend, the significant other or family and 49.7% (n=77) presented with high social support, and 55.5% (n=86) participants reported hopelessness symptomology. Finally, this chapter presented the statistical tests used to test the hypotheses.

All three hypotheses were tested separately to detect the influence and strength of each on and between variables. The results have shown the significant correlations and interactions between and within the variables. On one hand, the intervening role of hopelessness have shown that it highly mediates the relationship between depression and suicidal ideation. On the other hand, social support moderates the relationship between depression and suicidal ideation among adult female offenders. These interactions have been proven to be significant either at 1-tailed ($p<.05$) or 2-tailed ($p<.001$) level. The normality assessment of data distribution was tested to assist the researcher to choose the relevant tests to perform. The results revealed that data was normally distributed, and the Pearson's coefficient parametric tests processes were performed. The bivariate, linear and multiple regression analysis were performed to test the direct, indirect and total effect between the study variables.

All hypotheses for the study were supported by the findings. For example, depression positively and significantly predicts suicidal ideation on the direct effect. When combined with hopelessness to test the mediation effect of hopelessness between independent variable and dependent variable, depression became non-significant. Thus, strengthening the mediating effect of hopelessness between depression and suicidal ideation. Moreover, Social support is the moderation variable in the relationship between depression and suicidal ideation. The results revealed that on one hand, the little the level of social support, more depressed and hopelessness participants become, thus increasing the chances of suicidal ideation among participants. On the

other hand, the more support available the less participants with depression become hopeless, thus very slim chances of participants to think about suicidal. This suggests that social support in its existence, buffers the relationship between depression, hopelessness, and suicidal ideation. The results are interpreted and discussed in Chapter 6.

CHAPTER 6

DISCUSSION

Mental health has been reported to be one of the main factors that contribute to individual's suicidality, not to mention in the correctional services institutions. Suicide has also been reported to be the worrying cause of unnatural deaths in correctional service centres specifically in South Africa. The purpose of this study was to investigate a relationship between depression and suicidal ideation among female offenders in a correctional facility. The study further investigated the intervening roles of social support and hopelessness on the relationship between depression and suicidal ideation among the same group.

This chapter thus describes and discusses the results as they emanated from data analysis. The discussion centres on the main research objectives, to assess the prevalence and correlates of depression and suicidal ideation among adult female offenders; to examine associations between depression and suicidal ideation among adult female offenders, and to examine the intervening roles of hopelessness and social support on the relationship between depression and suicidal ideation among adult female offenders in a correctional facility in South Africa. The Interpersonal Theory of Suicide (ITS), Hopelessness theory of Depression (HTD) and Social Support Theory (SST) were adopted to guide the data gathering and measurement instruments. The discussion on theoretical frameworks concentrates on understanding to what extent one can conclude that a participant is symptomatic of depression, suicidal ideation, hopeless or/and receive social support.

The key results of the study found the significant severe prevalence of depression and moderate prevalence of suicidal ideation among the female offenders. Furthermore, hopelessness significantly mediates and increases the probability of suicidal ideation among adult female offenders. This entails that depression has a direct effect on hopelessness and

suicidal ideation respectively. Hopelessness also has a significant direct and indirect effect on suicidal ideation.

The key findings also found that social support has a significantly negative effect on the relationship between depression and suicidal ideation. Therefore, Social Support buffers suicidal ideation where the more social support received, the less chances of suicidal ideation among adult female offenders.

The first objective of the study aimed to examine the prevalence and correlates of depression and suicidal ideation among adult female offenders in the correctional service centre. The definition of depression was understood through the consultation of the DSM-IV (2013) where depression designate a complex pattern of deviation of feelings, cognition, and behaviour that is not represented as a discrete psychiatric disorder. Thus, Hopkins Symptoms Checklist was used to measure depression as it aligns with the requirement of the DSM-V symptomatic diagnosis of depression. The current study found that 94.8% (n=147) of participants had experienced depression two weeks prior and including data collection period. This prevalence of depression among adult female offenders in the correctional services centre is relatively higher when compared to results obtained in other correctional centres in South Africa and Africa at large. In 2015 a study of 64 incarcerated female offenders found that the majority of respondents reported normal to moderate level of depression, 69.8%, anxiety (68.3%) and stress (74.2%) (Steyn & Hall, 2015).

Cabeldue et al. (2019) assert that female offenders experience mental health problems at a higher rate than males. The current study was conducted with female offenders only. The results confirms that depression is a big issue in correctional service centres especially for female offenders. Cabeldue's study revealed that the rate of depression among female offender population is 51.0%. The study results further reveal that depression significantly predicts suicidal ideation among adult female offenders. This rate adds to varying rates of

depression among female offenders reported in the globe. These results sentiment various previous study results where Steyn and Hall (2015) in Gauteng, South Africa, found that incarceration is a highly stressing experience that have devastating effects on the offenders' wellbeing, depression, 69.8%, an anxiety (68.3% and stress (74.2%). In a study by Lynch et al (2014) who in their study found that 75% of participants had serious mental illness. This was also confirmed by Bronson and Berzofsky (2017) that in their study, 65% of incarcerated women were diagnosed with alarming extent of mental health disorder.

Furthermore, literature has reported that depression has become the most common form of mental disorder among offenders (Mandriaccha & Smith, 2015). In a study by Shrestha et al. (2017) with 434 inmates in Nepal, it was reported that the prevalence of depression was 35.3% which differs from the current study's results. Equally, Girma et al (2022) conducted a cross-sectional study to assess the prevalence of depression and the associated factors among offenders in Ethiopia where 29.9% of offenders were diagnosed and symptomology with depression. In a similar context, Alemayehu et al. (2019) reported the prevalence of 45.5 % of depression among offenders.

According to Steyn and Hall (2015) the first study to determine the prevalence of mental disorders in South African correctional centres was conducted by Naidoo and Mkize in 2010 in Durban. Naidoo and Mkize's study (2012) results had no difference from international research as alarmingly large number of offenders with psychosis or depression were not treated. In their study, most offenders showed a high prevalence of disorders including depression and anxiety. In a study by Shishane (2020) which aimed to quantitatively examine the relationship between mental health and recidivism among incarcerated youth offenders in South Africa and the role of substance use. It was revealed that 279 (99.6%) offenders were symptomatic of depression which indicates a high mental

health crisis among offenders. In line with these results, this study confirms that there is high prevalence of among offenders specifically women in Durban correctional service centre.

Recently, in a study by Naidoo et al. (2022) with an aim to measure the prevalence of mental health, borderline and antisocial personality disorders, and HIV among female offenders in Durban correctional services. It was found that depressive disorder had a prevalence of 70.6%. It can thus be concluded that indeed offenders are at risk of being depressed. One can conclude that mental health specifically depression is a critical issue among female offenders in the south African correctional service centres. This needs an urgent intervention where mental health among offenders is addressed accordingly.

The second part of objective aimed to examine the prevalence of suicidal ideation among adult female offenders. The interpersonal theory of suicide (ITS) guided on the symptomology of suicidal ideation to understand the aspects to be assessed on one and conclude that the person has suicidal thoughts. The ITS is of the assumption that suicidal desire emerges when one experience perceived burdensomeness, thwarted belongingness and acquired capability to die (Joiner, 2005). Thus, Beck Scale of Suicidal ideation (BSSI) was chosen as a measure for this variable. The BSSI_19 items present these three constructs of ITS. There are items that seek information with regards to not belonging somewhere, loss of hope and readiness for one to take their own life. Favril et al. (2017) and Egziabher et al. (2018) reported that suicide continues to be a major public health concern, affecting people across lifespan regardless of their demographic background. Furthermore, suicide remains the leading cause of mortality in custodial settings across the globe (Butler, Young, Kinner, & Borschmann, 2018). Egziabher et al. (2018) state that in Chicago female inmates' suicidal ideation in their lifetime was 53%; and in the US correctional services, hopelessness, aggression, impulsivity, low reason for living, low social support and low self-esteem was found to be associated with suicidal ideation.

The current study confirms that offenders are at high risk of suicidality, especially adult female offenders. The results of the current study revealed that participants n=44 (28.4%) reported high suicidal ideation. These results support the available literature in other countries where research was conducted with female offenders. Cheng and Gueta (2017) assert that women suicide rate is substantially higher in correctional facilities, putting females at a higher risk of committing suicide compared to male inmates. Furthermore, it was reported that more than half of the women had a history of suicidal ideation or attempts as a result of childhood victimization, early onset of substance abuse, and high prevalence of mental health problems in the family (Cheng & Gueta, 2017).

The current study did not find any participants' history or background check factors leading to suicidal thoughts. In another study conducted by Favril and Laenen (2019) to investigate the correlates of suicidal ideation among 123 women incarcerated in Flanders, Belgium. It was found that women with recent suicidal ideation while incarcerated were significantly more likely than their non-suicidal peers to report a lifetime history of non-suicidal self-injury (suicidal ideation, 57.7% and attempts were 36.6%) respectively.

Yu, Sung, Mellow, and Shlosberg (2014) conducted a study to examine the prevalence and correlates of suicidal ideation among parolees and non-parolees. The average prevalence of suicidal ideation among parolees (8.6%) was more than twice that among non-parolees (3.7%). Characteristics associated with decreased suicidal ideation among non-parolees, such as being married, older and employed were not related to lower suicidal ideation among parolees. Favril et al. (2017) in the same note conducted a cross-sectional study to examine the correlates of suicidal ideation among male inmates in a sample of 1203. The lifetime history of suicidal ideation was 43.3% and attempts was endorsed by 20.3% of respondents respectively.

Literature indicates that there is a strong association between mental health and suicidal behaviour among incarcerated population whose life is restricted and predetermined by laws and security officials in correctional facilities. Baranyi et al (2019) state that offenders with untreated mental health issues are at high risk of suicide attempts, death or even rearrest. The second objective of the current study was to investigate the relationship between depression and suicidal ideation. This objective hypothesised that depression predicts suicidal ideation among adult female offenders. The results of this study supported this hypothesis as it was confirmed that depression significantly predict suicidal ideation among adult female offenders. That is, 17% of suicidal ideation is significantly contributed by being depressed among adult female offenders ($B=.409$, $t=5.566$, $p<.001$).

The study results further support Favril et al. (2020) who conducted a study to examine how different mental disorders relate to distinct stages of the suicidal process transitioning from ideation to action. The results revealed that 34% of offenders reported lifetime history of suicidal ideation, and 55% reported attempted suicide at some point in life. Egziabher et al. (2018) accordingly reported that in Chicago female inmates' suicidal ideation prevalence in their lifetime was 53% and depression was one of the factors found to be associated with suicidal ideation. Demographic characteristics were not associated with depression and suicidal ideation in the current study results. Nseluke and Siziya (2011) argue that incarceration itself has a negative psychological and physical contribution; and psychiatric magnitude has increased on inmates which leads but not limited to psychological decline, emotional withdrawal, depression, and suicidal thoughts.

The third objective of the study aimed to investigate the intervening role of hopelessness in the relationship between depression and suicidal ideation among adult female offenders. The intervening role of each variable was hypothesised and tested separately. The hopelessness theory of depression was used to provide guidance on the data gathering tools

that could be used to examine hopelessness symptomology among offenders. with this guide, one can conclude that the participant is has lost hope. Abramson, Seligman, and Teasdale (1978) who is responsible for the reformation of hopelessness theory argue that people are depressed because of attributions they make for why unfortunate things happen to them. Which make them to be prone to hopelessness for their pessimistic attributions which lead them to believe that things will never change no matter what endeavours put in place.

The current study hypothesised that hopelessness mediates the relationship between depression and suicidal ideation among adult female offenders. The results of the current study revealed that hopelessness indeed has a mediation role (58%) in the relationship between depression and suicidal ideation among the specified population. According to Metalsky and Joiner (1992, p.667) hopelessness takes place when an "expectation of the highly desirable outcomes will not occur and that one is powerless to change the situation". With the adoption of Beck Hopelessness scale (BHS_20) hypothesis three (H3) was proven correct. Firstly, participants reported high prevalence of hopelessness which was then tested as a significant positive predictor of suicidal ideation. That is, with increased hopelessness experience, there is 58% increase of suicidal ideation among depressed adult female offenders in the selected study location.

Mental health disorders have been confirmed to be one of the main risk factors that trigger hopelessness among offenders which lead to suicidal thoughts and behaviours. For example, McKeown et al. (2016) reported that hopelessness plays an integral role in suicide. Equally, Gooding et al. (2016) in their cross-sectional study with a sample of male offenders found that affective component of hopelessness predicted suicidality. Cohen (2022) found that the baseline levels of hopelessness predicted depression levels and an increase in depression levels predicted suicidal ideation outcomes. The current study found that an increased depression levels predicts hopelessness and increased hopelessness levels predicts

suicidal ideation, which makes hopelessness a significant mediator on the relationship between depression and suicidal ideation.

Lastly, the study examined the intervening role of social support in the relationship between depression and suicidal ideation. This study hypothesised that social support moderates the relationship between depression and suicidal ideation among adult female offenders. The guide on the measurement for social support was found from the adoption of social support theory. The social support theory rests on the propositions that informational, instrumental, emotional support and appraisal lessen adversarial effects of stressful life events (Cassel 1976, Cobb 1976, Sarason & Sarason 1985). According to Langford et al. (1997, p. 96) "Emotional support involves the provision of caring, empathy, nurturance and trust between two persons or more". Instrumental support refers to one's provision of tangible assistance to others (Tilden & Weinert, 1987).

Tangible assistance is described by Langford et al. (1997) as physical or solid assistance including financial assistance or carrying out assigned task or work for other people. Informational support refers to the information offered to another person during time of stressful situation in one's life and the process of solving the problem (House, 1981; Tilden & Weinert, 1987). Appraisal support refers to what Kahn, Baltes, Brim and Antonucci (1980) call affirmational support which involves communication that affirms the acts completed by other people. This support can be provided by either the significant other, a friend or family member and serves as related in encouraging one to continuously use available resources and coping strategies to best manage stressful life events.

The social support was measured with the Multidimensional scale of perceived social support (MSPSS). The scale consists of twelve items that are grouped into three categories. With reference to the theory and the scale, any of the dimensions described in the theory may be provided by either a family member, friend or a significant other. Thus, the theory of

social support succeeded in guiding the choice of data collection tools relevant in this study. That is, current study results revealed that n=80 (54.8%) of participants had support system and n=70 (45.2%) does not have support from either or all of the sources of support mentioned above. This current study's hypothesis was supported as the results show that, there is significantly negative moderation effect of social support in the relationship between depression and suicidal ideation. That is, social support contributes 34% effect on buffering suicidal ideation.

It can thus be safe to say that the availability of social support in one's life moderates the level of depression, hopelessness and suicidal ideation. These findings support the existing literature on the effect of social support on suicidal ideation. For instance, Kort-Butler (2018) states that social support serves as a buffer between the environmental stresses and psychological wellbeing. On the similar note, a study by Keliman et al. (2014) who conducted a study to examine the role of social support and positive events as protective factors in suicide among 379 participants. It found that social support had direct protective effect on suicidal ideation. Moreover, various authors accordingly state that the relationship between stressful life events and depression is stronger among individuals who have low social support, and that social support can buffer effects of negative life events on outcomes like suicidality (Moore et al., 2021; Ding et al., 2018; Cheong et al., 2017; Kleiman et al., 2014). The subsequent chapter details the conclusions and recommendations emanating from the findings of this study.

CHAPTER 7

CONCLUSION

This study holistically aimed to investigate the relationship between depression and suicidal ideation among adult female offenders in a correctional facility, and the role of hopelessness and social support in the relationship between depression and suicidal ideation. This chapter presents key results and provides the main conclusions and recommendations of the study with regards to the extent to which the research objectives and hypothesis of the study outlined in chapter one and chapter four were achieved.

The study firstly assessed the prevalence and correlates of depression and suicidal ideation among adult female offenders. The results revealed that there is significantly high prevalence of depression and suicidal ideation among adult female offenders. Furthermore, the study found that there is significantly moderate positive correlation between depression and suicidal ideation.

Objective 2 aimed to examine associations between depression and suicidal ideation among adult female offenders. The hypothesis linked to this objective is that depression predicts suicidal ideation among adult female offenders. The study found a significantly positive effect of depression (17%) on suicidal ideation among adult female offenders. this is a direct effect of depression on suicidal ideation. When depression was combined with hopelessness as predictors of suicidal ideation and a mediator, depression became non-significant and hopelessness contribution level was very high (58%) which decreased the effect of depression.

This shows that hopelessness' mediating role (indirect effect) is higher than the direct effect of depression alone on suicidal ideation. These findings are important from an applied perspective because psychosocial service providers (psychologists and social workers) in

correctional centres should be able to monitor and identify differences in offenders as incarceration sentence continues. Thus, hopelessness is a critical variable that needs someone to be cognisance of.

Objective 3 was in two-folds. It aimed to examine the intervening roles of hopelessness and social support on the relationship between depression and suicidal ideation among adult female offenders. This objective was divided where hopelessness and social support were tested separately. From this objective, two hypotheses were formulated. The reformulated hypothesis was that hopelessness mediates the relationship between depression and suicidal ideation. Second hypothesis was that social support moderates the relationship between depression and suicidal ideation. To test the mediating effect of hopelessness, firstly the correlates of depression and hopelessness was tested. The results revealed that there is significant positively moderate relationship between depression and hopelessness with 28.7% effect among adult female offenders. The direct effect of hopelessness on suicidal ideation was further tested, and the results revealed significantly high effect. The indirect effect of hopelessness was tested and was found to be the strong mediator between depression and suicidal ideation to an extent that depression's effect decreased. Thus, objective 3, (Hypothesis 2) was supported by the results of the study.

All variables when simple linear regression was run, revealed that they have direct effect into suicidal ideation. Furthermore, depression was combined with social support in one model, depression's role became non-significant. These are important results to report so that social service providers should be able to identify after their screening, the exact predictor of suicidal behaviour among offenders without concluding that depression is the main cause factor. Thus, depression alone cannot be assumed to be the main predictor of suicidal ideation, rather, other additional factors contribute to its outcome.

This study embarked on research in an area and population group that is mostly neglected in South Africa. Judicial Inspectorate for Correctional Services (2018/2019) reports the inability of the correctional service department to respond to the mental health needs of offenders especially females as a problem, although in the location of this study, each centre has been allocated a psychologist with a hope that positive impact will take place. This study found a high prevalence of depression, hopelessness and though not high prevalence of suicidal ideation among adult female offenders incarcerated in Durban correctional service centre.

This study further found that social support serves as a significant moderator in the relationship between depression and suicidal ideation. This was found from multiple regression analysis. The results revealed that with less social support, depression and suicidal ideation symptomology increased and alternatively, with more social support, both depression and suicidal ideation decreased. This supports the social support theory in assuming that when one of the dimensions of social support, significant other, friends or family is available, there are slim chances for one to either lose hope or think about or attempt suicide.

The regression model was significant in revealing that depression predicts suicidal ideation; hopelessness significantly mediated the relationship between depression and suicidal ideation; and social support significantly moderates the relationship between depression and suicidal ideation among adult female offenders.

7.1.Recommendations

7.1.1Recommendations for social work and correctional practice

In this study the combination of depression and hopelessness showed a significantly moderate prediction of suicidal ideation. Depression significantly predicted suicidal ideation, and hopelessness predicted suicidal ideation respectively. However, hopelessness is an extreme

predictor of suicidal ideation with 58% compared to depression which had a prediction effect of 17% of suicidal ideation. It has been further discovered in this study that the availability of social support among adult female offenders, buffers depression and hopelessness which may lead to decreased suicidal ideation. This yields to recommendation of programs that will provide the collective support to female offenders who may be deprived of this important resource. Based on the study's findings, it is recommended that the Department of Correctional Services be cognisant of offenders who after being sentenced, lose ties with, and become a shame and abandoned by their friends, significant others and families. Any support that may be available is important for an offender to adjust after being sentenced.

The programs provided by the department of correctional service and facilitated by social workers are same for both males and females, even the content thereof. These programs are anger issues and management, cross-roads, restorative justice, life skills, substance abuse, supportive services, trauma counselling, and sexual problems, which are good programmes, but they should meet the requirements and the needs of specific groups offenders. This study, considering that more female offenders who participated were sentenced for murder and are from the maximum-security sections, something needs to be explored about their screening and continuous monitoring and evaluation of their settling in the centre and with other mates.

7.1.2Recommendations for future research

The study further suggests that future studies should explore more on hopelessness among female offenders and the pushing factors for such experience may assist in mapping up the effective strategies that are specific to the problem and need of offenders. Such practices may positively contribute to mitigating shortfall of Section 1B of the Criminal Procedure Act 51 of 1977. The act emphasises the responsibility to improve mental health or the lack. This

clause is integrated as part of the risk need assessment and not required from the party who raises the issue.

The current results reveal that there is a notable prevalence of mental health issue, specifically depression and hopelessness among adult female offender population. Therefore, inferences can be made about criminalisation of suicidal behaviour but cannot be confirmed with the current data. Thus, future studies can explore the criminalisation of suicide attempts and hopelessness as this was not explored in this study. The study further focused on hopelessness as a mediating variable but not as a direct predictor for suicidal ideation. However, the results reveal a high effect of hopelessness on suicidal ideation. Thus, in qualitative research, hearing the voices of female offenders on their experiences during incarceration will provide a rich information and lead to informed decision and planning on the programs that will reduce the level of suicide in the correctional services centres for both males and females.

It is further important include the demographic item of the *'time that has been spent'* in the correctional services when assessing the depressed and suicidal ideation against the non-depressed and non-suicidal groups in the correctional facilities. Due to the worrying rate of female offenders who reported high prevalence of suicidal ideation in this study (n=44), which to some extent confirms the unnatural deaths reported by the DCS annual reports every year, the latter is considered important for both males and females correctional centres.

The effect of social support on the relationship between depression and suicidal ideation was significantly moderately negative. This entails that an increase in social support would lead to a decline in depression, hopelessness, and suicidal ideation. The majority of participants who reported to have high prevalence of suicidal ideation also reported to have high prevalence of social support. More research needs to be conducted on understanding the types of programs and services aimed to support female offenders during their stay in

correctional facilities, and how often these services are utilised. This study did not establish the factors leading to suicidal ideation from the perspectives of the participants. Thus, pointing to further conducting of the exploratory study where participants will narrate their life stories while incarcerated.

Finally, a study that will focus on the extent to which services available are utilised by offenders and the extent to which these services and programs effect the offenders is important for program modification and transformation purposes.

7.2. Implications for social work practice

The results of the current study have a great potential to inform social work practice especially social workers who interact and provide services to people who are and have been in conflict with the law. Social workers play a critical role in providing therapy and care for both inmates and offenders in the correctional service centres during the helping process (Egan, 2014). The helping process in the correctional centre begins with the entry as an inmate waiting trial, after being sentenced as offenders and in preparation for community reintegration s parolees. Thus, with these results, social workers will be aware of the situation and conditions that offenders (especially females) have, and then be able to negotiate with the department on the effective programs that deal will the reformation of an offender. Social workers are bound to be non-judgemental, start where the client is and work with the client throughout the helping process. This is a daunting practice whereby without fully understanding what the client is going through; it will be difficult to provide effective service that change the person for better.

Moreover, the need for social workers to intervene at different levels (case, group and community work) will better be informed by the investigation results of research so that the interventions serve the population it is aimed at. Finally, social workers are in the best

position to advocate for change, development of policies, formulation and implementation of programs. They are guided by the SACSSP codes of ethics to practice with integrity, respect people's worth, human rights and dignity, work towards social justice of the people they are serving, practice with dignity, show care and concern of individuals, groups and communities' wellbeing, service delivery, being competent and being professionally responsible (South African Council for Social Service Professions, 2005).

The major implication for this research is the movement towards improving the depression assessment process during intake and monitoring and evaluation of the process until the offender is either transferred or reintegrated with the family and community. The screening and specific to the need interventions will improve the mental health of the offenders. Thus, psychosocial service providers in the correctional service centres can play a crucial role in engaging with offenders from the entry stage.

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APPENDIX I

CONSENT FORM

UNIVERSITY OF KWAZULU-NATAL

Appendix I

PhD research

Dear Madam

My name is: Hloniphile Khuzwayo

Contact details: [redacted]

Occupation: PhD candidate

My Supervisor: Professor Johannes John-Langba

Occupation: Social Work Discipline Academic Leader

Contact details: 031260 2792

Institution: University of KwaZulu Natal

You are kindly requested to partake in the research study that aims:

- To investigate the relationship between depression and suicidal ideation among adult female offenders in a correctional facility, and

- To investigate the intervening role of hopelessness and social support in a relationship between depression and suicidal ideation among adult female offenders in a correctional facility.

This study may possibly encompass the subsequent psychological risks or discomfort. Having mentioned that, I hope that this study will offer benefits to participants as follows: direct benefit on the intervening programs that are gender specific for women; it will also be beneficial substantially in informing policy makers as well as offenders' mental health within the correctional facilities. In the event of the occurrence of the potential risks during the session, the process will be stopped, and relevant referral will be made for psychosocial interventions that are available in the centre.

The session will take place once only as participants will be reading and answering the questionnaire on their own, for approximately 40-60 minutes.

If you decide to participate in my study, few things need to be noted:

Secrecy part, the responses provided will not have your identifying information; and findings will not be individually specified.

Participation in this study is voluntary and you have the right to withdraw anytime for whatever reason, without any negative impact towards yourself.

Participation is voluntary and there will be no payment of some sort.

In the event of any problems or concerns/questions you may contact the researcher, Ms H Khuzwayo on [redacted]; and my supervisor Prof J. John-Langba at 031 2602792. For further enquiries please do not hesitate to contact Miss Duduzile Dlamini of the research ethics committee at DlaminiD@ukzn.ac.za (031 260 3587/4609).

Declaration

I,_____ the undersigned declare that I have read and understood the information above.

Name_____

Signature_____

ISICELO SEMVUMO YOKUBA UBE YINGXENYE UCWANINGO

Olubandakanya abantu ekubeni yingxenye yalo

Ifomu lesaziso ngocwaningo

Imininingwane yocwaningo

Usuku:

Ngiyakubingelela

Igama lami ngingu Hloniphile Khuzwayo owenza ucwaningo ephuma eNyuvesi yakwaZulu Natal ngaphansi kophiko lwezoSonhlalakahle. Ngitholakala ku 210512965@stu.ukzn.ac.za noma kulenombolo [redacted].

Uyamenywa ukuba ube yingxenye yocwaningo oluphenya ngobudlelwano obukhona phakathi kokudangala kanye nokucabanga kokuzibulala kubantu besifazane abasezikhungweni zokuhlunyeleliswa kwezimilo. Loluphenyo lubuye lubheke nendima edlalwa wukulahlekelwa yithemba nokwesekwa ngalesisikhathi abesifazana besalindile noma sebedonsa izigwebo zabo kulesisikhungo. Inhloso yalolucwaningo ukuthola ukuthi bukhona yini lobudlelwano obuchazwe

ngenhla, ngenhloso yokuqhamuka nezindlela abesifazane abangalekeleleka ngazo ukugwema ukucabanga ngokuzibulala, nokwesekwa abangase bakuthole.

Lolucwaningo kulindeleke ukuthi lube nabantu besifazane ababambe iqhaza abayikhulu namashumi ayisishiyagalolunye abasesikhungweni sabesifazane sokuhlunyeleliswa kwezimilo eThekwini. Lolucwaningo luzokwenziwa ngalendlela elandelayo:

- Uma uvuma ukuba yingxenye yalolucwaningo ngizonikezela ngamaphepha anemibuzo umuntu azoziphendulela yena lona, ngokuyimfihlo yakhe
- Ayidingeki imininingwane yakho kuleliphepha
- Leliphepha linemibuzo ehlukene izigaba ezinhlanu,
    - imibuzo emayelana nawo kodwa ayi igama lakho
    - imibuzo emayelana nokuba nengcindezi noma ukudangala esikhathini esingangamasonto amabili adlule kubalwa nanamuhla;
    - imibuzo emayelana nokucabanga ukuzibulala;
    - imibuzo emayelana nokulahlekelwa yithemba ngesikhathi udonsa isigwebo sakho
    - nemibuzo emayelana nokwesekelwa okutholayo ngesikhathi usesikhungweni sokuhlunyeleliswa kwezimilo

Lolucwaningo kulindeleke ukuba luthathe isikhathi esiphakathi kwemizuzu engamashumi amane kuya ehoreni elilodwa (40-60 imizuzu).

Kungenzeka lolucwaningo noma imibuzo ebuzwayo ikufake engindezini ethile, mhlampe uphazamiseke ngokomqondo noma ngokomphefumulo. Uma ufikelwa yilesosimo ungathintana nosonhlalakahle noma umcwaningi ukuze akulekelele lapho uphazamiseka khona.

Lolucwaningo luthole imvume yokulwenza eskhungweni sezemfundo esiphakeme KwaZulu Natal Humanities and Social Sciences Research Ethics Committee (_____).

Qaphela ukuthi ukuba yindlenye yalolucwaningo kusuka ekuthandeni kwakho, ungashiya noma yinini umangabe uzizwa ungasathandi ukuqhubeka nalolucwaningo ngaphandle kokuhlawuliswa noma unswinyo kwizinsiza ofanele ukuzithola.

Ukuba yingxenye yalolucwaningo akunankokhelo yanoma yiyiphi indlela.

Ubumfihlo bezimpendulo bakho buqinisekisiwe ngokuthi imiphumela iyobe ingabhekisiwe kuwe kodwa ezimpendulweni ezihlangene ezizobe zitholakele. Izimpendulo zakho angeke zinikezelwe kubaphathi besikhungo yokuhlunyeleliswa kwezimilo. Futhi nezimpendulo zakho uzobe uzibhala phansi ephepheni akekho ozokwazi ukuthi uphendule wathini.

Imininingwane etholakele iyogcinwa ekhabetheni elikhiywayo ehhovisi likaphathi wami ukuze angabi bikho okwazi ukufinyelela kuyo. Lezizipmpendulo zizogcinwa kuzekube yiminyaka emihlanu emumva kokuqeda ucwaningo.

Isivumo

Mina……ngichazeliwe ngalolucwaningo oluhlola ubudlelwano Phakathi kokudangala nokucabanga ngokuzibulala kubantu abakhulile besifazane, nendima edlalwa ukulahlekelwa yithemba nokusekekeleka kulezizimo ezimbili olwenziwa uHloniphile Khuzwayo.

- Ngiyayiqonda inhloso nenqubo yalolucwaningo.
- Nginikiwe ithuba lokubuza lapho ngingacaciselekile khona futhi nganelisekile ngezincazelo.
- Ngiyaqinisekisa ukuthi ukubamba iqhaza kulolucwaningo kusuka othandweni nokuthi ngingahoxa noma yinini uma ngingasafisi ukuqhubeka ngaphandle kokuchaphazeleka ngokuthile emalungelweni ami ebengivele nginawo.
- Ngichazeliwe ngosizo engizolithola uma kwenzeka ngiphazamiseka ngokomqondo ngesikhathi socwaningo.

Ngiyakuqonda ukuthi uma kwenzeka ngiba nemibuzo ehambisana nocwaningo ngingathintana nomcwaningi ku 210512965@stu.ukzn.ac.za noma [redacted].

Uma nginemibuzo ngamalungelo ami njengengxenye yocwaningo ngingathintana neHhovisi lezocwaningo lase Nyuvesi yakwaZulu Natal:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

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Ngiyavuma ukuba ngibe yingxenye yalolucwaningo:

Ukusayina kombambi weqhaza kulolucwaningo:_____

Usuku:_____

Ukuqinisekisa kukafakazi:_____ Usuku:_____

APPENDIX II

QUESTIONNAIRE

IMIBUZO YESIFUNDO

Isihloko socwaningo: Uphenyo ngobudlelwano phakathi kokudangala kanye nemicabango yokuzibulala phakathi zabesifazane abadala ababoshwe esikhungweni sokuhlunyeleliswa kwezimilo eNingizimu Afrika: indima edlalwa wukuphelelwa ithemba nokusekelwa komphakathi.

INGXENYE A: Izimo zokuhlalisana kwabantu

Lesisigaba esilandelayo sifisa ukuthola imininingwane ngemvelaphi yakho. Uyacelwa ukuba uphendule ngokwethembeka futhi khumbula ukuthi ayikho impendulo ethathwa ngokuthi iyiqiniso noma eliphutha

1.	Wawuhlanganisa iminyaka emingaki ngosuku lwakho lokugcina lokuzalwa?	……. (iminyaka)
2.	Wagcina kuliphi ibanga lezemfundo	□ angikaze ngiye eskoleni □ amabanga aphansi □ amabanga aphakathi □ amabanga aphezulu
3.	Yibuphi ubulili bakho?	□ Isilisa □ Isifazane
4.	Uzichaza ngaphansi kwabuphi ubuzwe?	□ Black □ Coloured □ White □ Indian/Asian
5.	Isimo sobudlelwano bakho?	□ Ushadile □ Angikaze ngishade □ Sahlukanisa ngokomshado □ Ungufelokazi □ Unomasihlalisane □ sisahlukene ngokobudlelwane

6.	Unabo abantwana? Bangaki?	□ anginaye □ 1 uyedwa □ 2 babili □ 3 bathathu □4 bane □ 5 bahlanu □ bangaphezu kwabahlanu
7.	Wazalelwa kusiphi isifundazwe?	□ KwaZulu-Natal □ Gauteng □ Western Cape □ Eastern Cape □ Limpopo □ Northern Cape □ Free State □ North West □ Mpumalanga □ not in South Africa
8.	Isimo sakho somsebenzi ngaphambi kokuboshwa	□ Yebo □ Chabo
9.	Uhlobo lwecala elenziwe	□ ukukhwabanisa □ ukutholakala nezidakamizwa □ ukubamba inkunzi □ elokubulala □ elokulimaza □ elezomnotho □ elimayelana nocansi □ukushayela uphuzile □ icala lemoto □ elokubulawa kwabantu □ elinye (ngisacela ucacise) …….
10.	Umlando wokuba necala	□ icala lokuqala □ ukuboshwa okokuqala □ uboshelwe icala lamanje □ uboshelwe icala eledlule
11.	Singakanani isikhathi sesigwebo sakho?	Usalinde isigwebo □ ngaphansi konyaka owodwa □ siphakathi konyaka neminyaka emihlanu □ Phakathi kweminyaka eyisithupha kuya kwelishumi □ udilikajele

INGXENYE B: Ngicela ufunde ngokucophelela iqoqwana ngalinye lezitatimende ngezansi. Iqoqwana lilinye linezitatimende ezintathu (3).

Ngicela ubeke uphawu X maqondana nesisodwa esichaza kangcono indlela obuzizwa ngayo esikhathini esingangamasonto amabili edlule kuhlanganisa nanamuhla.

Isitatimende		Izimpendulo	Ngicela ufaxe u X kulokho okuhambisana nawe
12.	Ukuthanda ukuphila	a) Nginesifiso esilingene kuya kwesiqinile sokuphila	
		b) Nginesifiso esincane sokuphila	
		c) Angikufisi ukuphila	
13.	Isifiso sokufa	a) Angifisi ukufa	
		b) Ngiyafisa ukufa	
		c) Nginesifiso esilingene kuya kwesiqinile sokufa	
14.	Izizathu enginazo ngokuphila	a) Izizathu zami zokuphila ziyazedlula ezokufa	
		b) Izizathu zami zokuphila nezokufa zicishe zilingane	
		c) Izizathu ami zokufa ziyazedlula ezokuphila	
15.		a) Angilangazeleli ukuzibulala	

	Ukulangazelela ukuzama ukuzibulala	b) Nginokulangezela okuncane ukuzibulala	
		c) Ngilangazelela ngokuqatha ukuzibulala	
16.	Isifiso esingapheli sokuzibulala	a) Ngingazama ukuzihlenga impilo yami uma ngizithola ngisesimweni esibeka impilo yami engcupheni	
		b) Ngingenza noma yini uma ngizithola ngisesimweni esiyingcuphe	
		c) Ngeke ngithathe zinyathelo ukugwema ukufa mangizithola ngisesimweni esibeka impilo yami engcupheni	
17.	Isikhathi: ubungako besikhathi sokucabanga ukuzibulala	a) Ngineziwombana zokucabanga ngokuzibulala	
		b) Ngineziwombe ezithatha isikhashana sokucabanga ngokuzibulala	
		c) Nginesikhathi eside sokucabanga ngokuzibulala	
18.	Isikhathi: iziwombe zokucabanga ngokuzibulala	a) Kukancane ukuba ngicabange ngokuzibulala	
		b) Kungijwayele ukucabanga ngokuzibulala	
		c) Ngihlale ngicabanga ngokuzibulala	
19.	Imicabango, imibono/isifiso sokuzibulala	a) Angiwuvumeli umcabango wokuzibulala	
		b) Angivumelani noma ngiphikisane nomcabango wokuzibulala	

		c) Ngiyavumelana nomcabango wokuzibulala	
20.	Ukulawula isenzo noma imicabango yokuzibulala	a) Ngingakugwema ukuzibulala	
		b) Anginasiqiniseko ukuthi ngingabalekelana nokuzibulala	
		c) Angikwazi ukuqhelelana nokuzibulala	
21.	Ukuvimbela imizamo yokucabanga noma yokuzibulala ngenxa yabangani, umndeni, inkolo nokunye	a) Ngeke ngizibulale ngenxa yomndeni wami, abangani, inkolo, noma ukulimala okudalwa yimizamo ethile engakaphumelelanga nokunye	
		b) Ngiyathinteka ngandlela thize mayelana nokuzibulala ngenxa yomndeni, abangani, inkolo yami, nokulimala okuphuma emizamweni engaphumelelanga	
		c) Angithinteki nakancane mayelana nokuzibulala ngenxa yomndeni wami, abangani, inkolo, ukulimala okungadalwa imizamo ethile engaphumelelanga	
22.	Isizathu sokucabanga ngokuzibulala	a) Izizathu zami zokufuna ukuzibulala zihlose kakhulu ukwenza abanye abantu ukuthi banginake, noma bajabule, nokunye	
		b) Izizathu zami zokufuna ukuzibulala zihlose ukwenza abanye abantu banginake, nokuthi kuyindlela yokuxazulula izinkinga zami	
		c) Izizathu zami zokufuna ukuzibulala zimayelana nokubalekela izinkinga	
23.		a) Anginalo uhlelo lokuthi ngiyozibulala kanjani	

	Indlela yokuzibulala: ecacile/ithuba lomzamo wocatshangwayo	b) Kunezindlela eziningana engingazibulala ngazo kodwa angikahleli kahle	
		c) Nginendlela ethize yokuzibulala	
24.	Indlela yokuzibulala: ikhona/noma likhona ithuba lokuzama ukuzibulala	a) Angifinyeleli noma angilitholi ithuba lokuzibulala	
		b) Indlela engingayisebenzisa ukuzibulala ithatha isikhathi kanti angilitholi ithuba lokuyisebenzisa	
		c) Ngingafinyelela kwindlela engingayikhetha yokuziblala, futhi ngibe nanethuba lokuyisebenzisa	
25.	Umuzwa wokuthi ungakwazi ukuzibulala	a) Anginawo umdlandla wokuzibulala	
		b) Nginesiqinisseko sokuthi nginekhono futhi ngingakwazi ukuzibulala	
		c) Nginomdlandla nekhono okuzibulala	
26.	Okulindele/ukuqagela ngokuzama ukuzibulala	a) Angilindele ukuthi ngingazama ukuzibulala	
		b) Anginaso isiqiniseko sokuthi ngizozama ukuzibulala	
		c) Ngisesiqiniseko sokuthi ngizozama ukuzibulala	
27.	Amalungiselelo okuzama ukuzibulala	a) Awekho amalungiselelo engiwenzile okuzibulala	
		b) Akhona amalungiselelo engisawenzile okuzibulala	

		c) Sengicishe ngifike esiphethweni samalungiselelo okuzibulala	
28.	Incwajana ebika ngokuzibulala	a) Angiyibhalaile incwajana yokuzibulala	
		b) Ngicabangile ngokubhala incwajana yokuzibulala noma sengiqalile ukuyibhala kodwa angikayiqedi	
		c) Sengiyiqedile incwajana yokuzibulala	
29.	Izenzo zokugcina zokulungiselela ukuzibulala (umasingcwabisane, amapolicy, njalonjalo)	a) Angizenzile izinhlelo zokuthi kuyokwenzakalani masengizibulele	
		b) Ngicabangile ngezinhlelo ngokuzokwenzeka masengizibulele	
		c) Nginamalungiselelo aqondile okuzokwenzeka masengizibulele	
30.	Ukukhohlisa/ukufihla imicabango yokuzibulala	a) Angisifihlile isifiso sami sokuzibulala	
		b) Angitshele muntu ngokufuna kwami ukuzibulala	
		c) Ngizamile ukufihla, noma ukuqamba amanga ngokufuna kwami ukuzibulala	

INGXENYE C: imibuzo elandelayo imayelana nokuphila kwakho kusukela emasontweni amabili edlule kuza namuhla

Abantu abaningi baphile noma babonile umuntu onesimo sengcindezi ngokomqondo noma ngokomphefumulo empilweni yabo. Ngicela ukhombise ukuthi yikuphi okuhambisana nesimo sakho sempilo esikhathini engangamasonto amabili adlule kubalwa nanamuhla.

Lapho u-1 kungekho nhlobo kanti u-4 kakhulu

Khetha ngokubhala isiphambano 'X'esitatimendeni esihambisana nomuzwa wakho

	Ingabe kukhona oke wabhekana nakho kulokhu okulandelayo emasontweni amabili edlule?	**Chabo 1**	**Kancane 2**	**Yebo 3**	**Kakhulu 4**
31.	Ukuzizwa uphelelwa Amandla, wenqena				
32.	Ukuzisola ngokwenzeka kwezinto				
33.	Ukhala kalula				
34.	Ukulahlekelwa wumdlandla				
35.	Ukungathandi ukudla noma udle kakhulu				
36.	Kunzima ukulala noma engathi ungahlala ulele				

37.	Ukuzizwa uphelelwa yithemba ngekusasa				
38.	Ukuzizwa uphatheke kabi				
39.	Ukuzizwa uwedwa				
40.	Ucabanga ngokuqeda ngempilo yakho				
41.	Uzizwa ubambekile				
42.	Ukhathazeka kakhulu ngezinto ezenzekayo				
43.	Ukuzizwa ungalangazeleli lutho nje				
44.	Uzizwa sengathi yonke into iwumqansa				
45.	Uzizwa ungenamsebenzi walutho futhi uyisahluleki				

INGXENYE D: Imibuzo elandelayo inentshisekelo yokwazi ngemizwa yakho mayelana nokwesekwa obukuthola nosakuthola

Uyacelwa ukuba ufunde ngokucophelela bese ukhombisa ukuthi uzizwa kanjani ngesitatimende ngasinye

Sicela ukhombise izinga ovumelana ngalo noma ongavumelani ngalo nesitatimende esingezansi esikalini sika-1-7, lapho 1 =engavumelani kakhulu kanti 7=evumelana ngokuqinile.

	Isitatimende	Angivumelani kakhulu 1	Angivumi neze 2	Angivumi kancane 3	Angithathi hlangothi 4	Ngiyavuma kancane 5	Ngiyavuma 6	Ngivuma kakhulu 7
46	Kunomuntu okhethekile kakhulu oseduze mangimdinga							
47	Nginomuntu okhethekile engikwazi ukwabelana naye ngokujabula nangosizi lwami							
48	Umndeni wami uzama ngakho konke ukungisiza							
49	Ngithola usizo nokwesekeleka ngokomphefumulo emndenini wami							
50	Kunomuntu okhethekile ongumthombo wokungiduduza							

51	Abangani bami bazama okwangempela ukungisiza							
52	Ngingathembela kubangani bami uma izinto zingahambi kahle							
53	Ngingakwazi ukukhuluma nomndeni wami ngezinkinga zami							
54	Nginabangani engabelana nabo ngosizi nangenjabulo yami							
55	Kunomuntu okhethekile ongikhathalelayo ngemizwa yami							
56	Umndeni wami uyafisa ukungisiza ukuthatha izinqumo							
57	Ngingakhuluma nabangani bami ngezinkinga zami							

INGXENYE E: Imibuzo elandelayo ikubuza mayelana nomuzwa onawo ngethemba onlalo ngekusasa kusukela emasontweni amabili edlule kuhlanganise nenamuhla

Sicela ufunde izitatimende ngokucophelela ngasinye.

Uma isitatimende sichaza isimo sakho emasontweni amabili adlule kuze kube yinamuhla, faka u'X' ebhokisini eliqondene ne-**IPHUTHA** noma i**QINISO**

	Isitatimende	IPHUTHA	IQINISO
58.	Ikusasa ngilibuka ngethemba nangomfutho		
59.	Kungenzeka ngiphose ithawula empilweni ngoba ayikho into engisengayenza ukwenza ngcono impilo yami		
60.	Izinto mazingangihambeli kahle, ngisizwa wukwazi ukuthi ngeke kuhlale kunjena		
61.	Angikhoni ukucabanga ukuthi impilo yami izobe injani eminyakeni elishumi ezayo		
62.	Nginesikhathi esanele ukuzuzua izinto engifuna ukuzenza		
63.	Esikhathini esizayo, ngilindele ukuphumelela kwenginendaba nakho kakhulu		
64.	Ikusasa lami libukeka limnyama		
65.	Kuyenzeka ngibe nenhlanhla, futhi ngilindele ukuthola okuhle empilweni ukunomuntu nje		
66.	Ngeke ngikhululeke, futhi asikho isizathu sokwenza lokho nangesikhathi esizayo		
67.	Isikhathi esidlule singilungiselele kahle ngekusasa		
68.	Engikubona buqamama nami ukujabha ukunokwenama		
69.	Angilindele ukuthola engikufuna ngempela		
70.	Uma ngibuka ikusasa, ngilindele ukuthi ngizojabula ukunamanje		

71.	Izinto azihambi ngendlela engiyifunayo		
72.	Nginethemba elikhulu ngekusasa		
73.	Angikutholi engikufunayo, ngakho kuwubulima ukufuna nanoma yini		
74.	Mancane amathuba okuthi nganeliseke ngokuhamba kwesikhathi		
75.	Ikusasa limfiliba futhi aliqondakali kimi		
76.	Ngilangazelela kakhulu izikhathi ezinhle ukunezimbi		
77.	Akusizi ukuzama ukuthola nanoma yini ngoba ngeke vele ngiyithole		

Sesifike ekugcineni kwemibuzo:

Ngiyabonga kakhulu ngesikhathi sakho nokuthi ube yingxenye yalolucwaningo

APPENDIX II

STUDY QUESTIONNAIRE

Research title: An investigation into the relationship between depression and suicidal ideation among adult female offenders at a correctional facility in South Africa: The intervening roles of hopelessness and social support

PART A: Socio-demographics

INSTRUCTIONS

The next section seeks to get some information about your background. Please answer and remember there is no right or wrong answer. Please answer to the best of your ability tick or put an X the best corresponds to the answer

1.	What was your age on your last birthday?	……. (years)
2.	What is your highest level of formal education?	□ no education □ Primary school □ Secondary school □ Post-secondary school
3.	What is your sex?	□ Male □ Female □ Other □ Prefer not to say
4.	What population group do you identify with?	□ Black □ Coloured □ White □ Indian/Asian
5.	Marital status?	□ married □ never married □ divorced □ widowed □ cohabitation □ separated
6.	Do you have any biological children? How many child dependents do you have?	□ None □ 1 child □ 2 children □ 3 children □4 children □ 5 children □ more than 5 children
7.	What province were you born?	□ KwaZulu-Natal □ Gauteng □ Western Cape □ Eastern Cape □ Limpopo □ Northern Cape □ Free State □ North West □ Mpumalanga □ not in South Africa

8.	Were you in any form of formal employment before incarceration?	□ YES □ NO
9.	What offence were you being charged with?	□ fraud □ drugs offence □ robbery □ murder □ Assault □ economic □ Sexual offence □ Drunk driving □ motorist offence □ manslaughter □ Other (please specify) …….
10.	Offending history	□ First time offence □ first time incarceration □ Incarceration for current offence □ **Incarceration for previous offence**
11.	What is your maximum sentence period?	Awaiting trial □ sentenced less than a year □ one to five years □ six to 10 years □ more than 10 years □ Life

PART B: Please carefully read each group of statements below. Each group has 3 statements. Please tick with an **X** one **(1)** statement in each group that **best** describes how you have been feeling for the **past 2 weeks, including today**. Be sure to read all of the statements in each group before selecting a choice.

The statement below explains how you have been feeling for the past 2 weeks including today

	Statement	Response options	Please select one option with an 'X' as it applies to you
12.	Will to live	0 I have a moderate to strong will to live	
		1 I have a weak wish to live	
		2 I have no wish to live	
13.	Wish to die	0 I have no wish to die	
		1 I have weak wish to die	
		2 I have moderate to strong wish to die	
14.	Reasons for living	0 My reasons for living outweigh my reasons for dying	
		1 My reasons for living and dying are about equal	
		2 My reasons for dying outweigh my reasons for living.	
15.	Desire to make active suicide attempts	0 I have no desire to kill myself	
		1 I have a weak desire to kill myself.	
		2 I have a moderate to strong desire to kill myself.	
16.	Passive suicidal desire	0 I would try to save my life if I found myself in a life-threatening situation.	
		1 I would take a chance on life or death if I found myself in a life-threatening situation.	

		2 I would not take the steps necessary to avoid death if I found myself in a life-threatening situation	
17.	Time dimension: duration of suicidal ideation	0 I have brief periods of thinking about killing myself which pass quickly	
		1 I have periods of thinking about killing myself which last for moderate amounts of time.	
		2 I have long periods of thinking about killing myself	
18.	Time dimension: frequency of suicide	0 I rarely or only occasionally think about killing myself.	
		1 I have frequent thoughts about killing myself.	
		2 I continuously think about killing myself.	
19.	Attitude towards ideation/wish	0 I do not accept the idea of killing myself	
		1 I neither accept nor reject the idea of killing myself.	
		2 I accept the idea of killing myself	
20.	Control over suicidal action/acting out wish	0 I can keep myself from committing suicide.	
		1 I am unsure that I can keep myself from committing suicide.	
		2 I cannot keep myself from committing suicide.	
21.	Deterrents to active attempt (e.g. family, religion, friends, irreversibility)	0 I would not kill myself because of my family, friends, religion, possible injury from unsuccessful attempts etc.	
		1 I am somewhat concerned about killing myself because of my family, friends, religion, possible injury from unsuccessful attempt etc.	
		2 I am not or only a little concerned about killing myself because of my family, friends, religion, possible injury from unsuccessful attempts etc.	

22.	Reason for contemplated attempt	0	My reasons for wanting to commit suicide are primarily aimed at influencing other people such as getting even with people, making people happier, making people pay attention to me, etc.	
		1	My reasons for wanting to commit suicide are not only aimed at influencing other people, but also represent a way of solving my problem.	
		2	My reasons for wanting to commit suicide are primarily based upon escaping from my problems.	
23.	Method: specificity/opportunity for contemplated attempt	0	I have no specific plan about how to kill myself.	
		1	I have considered ways of killing myself but have not worked out the details.	
		2	I have a specific plan for killing myself.	
24.	Method: availability/opportunity for contemplate attempt	0	I do not have access to a method or an opportunity to kill myself.	
		1	The method I would use for committing suicide takes time, and I really do not have an opportunity to use this method.	
		2	I have access or anticipate having access to the method that I would choose for killing myself and also have or shall have the opportunity to use it.	
25.	Sense of capability to carry out attempt	0	I do not have the courage or ability to commit suicide.	
		1	I am unsure that I have the courage or ability to commit suicide.	
		2	I have the courage and the ability to commit suicide.	

26.	Expectancy/anticipatio n of actual attempt	0	I do not expect to make a suicide attempt.	
		1	I am unsure that I shall make a suicide attempt.	
		2	I am sure that I shall make a suicide attempt.	
27.	Actual preparation for contemplate attempt	0	I have made no preparations for committing suicide.	
		1	I have made some preparations for committing suicide.	
		2	I have almost finished or completed my preparations for committing suicide.	
28.	Suicide note	0	I have not written a suicide note.	
		1	I thought about writing a suicide note or have started to write one, but not completed it.	
		2	I have completed a suicide note.	
29.	Final acts of anticipation of death (e.g. Insurance, will, etc)	0	I have made no arrangements for what will happen after I have committed suicide	
		1	I have thought about making arrangements for what will happen after I have committed suicide.	
		2	I have definite arrangements for what will happen after I have committed suicide	
30.	Deception/concealmen t of contemplate suicide	0	I have not hidden my desire to kill myself from people.	
		1	I have held back telling people about wanting to kill myself.	
		2	I have attempted to hide, conceal, or lie about wanting to commit suicide.	

PART C: The next set questions will ask you about your wellbeing in the last two (2) weeks including today.

*Many people have lived through or witnessed one or more very emotionally and psychologically stressful events at some point in their lives. Please indicate which of these statements you have been experiencing in the past **two** weeks including today.*

*Where **1** is not at all and **4** is extremely*

Please indicate with an "X" the extent to which the statement is applicable to you.

	Have you experienced any of the following in the past two weeks?	**Not at all 1**	**A little 2**	**Quite a bit 3**	**Extremely 4**
31.	Feeling low in energy, slowed down				
32.	Blaming yourself for things				
33.	Crying easily				
34.	Loss of sexual interest or pleasure				
35.	Poor appetite/Overeating				
36.	Difficulty falling sleep or staying asleep				
37.	Feeling hopeless about the future				
38.	Feeling sad				
39.	Feeling lonely				
40.	Thoughts of ending your life				
41.	Feeling of being trapped or caught				
42.	Worrying too much about things				

43.	Feeling no interest in things				
44.	Feeling everything is an effort				
45.	Feelings of worthlessness, feeling like a failure				

PART D: The next questions are interested in knowing your feelings about the support you have been receiving

Please read each statement carefully and indicate how you feel about each statement.

Please indicate the extent to which you agree or disagree with the statement below on a scale of 1-7, where 1 =strongly disagree and 7=strongly agree

	Statement	Very strongly disagree 1	Strongly disagree 2	Mildly disagree 3	Neutral 4	Mildly agree 5	Strongly agree 6	Very strongly agree 7
46.	There is a special person who is around when I am in need							
47.	There is a special person with whom I can share my joys and sorrows							
48.	My family really tries to help me							
49.	I get emotional help and support I need from my family							
50.	I have a special person who is really a source of comfort to me							
51.	My friends really try to help me							
52.	I can count on my friends when things go wrong							
53.	I can talk about my problems with my family							

54.	I have friends with whom I can share my joys and sorrows							
55.	There is a special person in my life who cares about my feelings							
56.	My family is willing to help me make decisions							
57.	I can talk about my problems with my friends							

PART E: The next questions ask you about your feeling of hope for the future in the last two weeks including today

Please read the statements carefully one by one.

Please indicate with an X whether the statement below is true or false about your hope for the future in the past two weeks including today.

	ITEM	FALSE	TRUE
58.	I look forward to the future with hope and enthusiasm		
59.	I might as well give up because there is nothing, I can do about making things better for myself		
60.	When things are going badly, I am helped by knowing that they cannot stay that way forever		
61.	I can't imagine what my life would be like in ten years		
62.	I have enough time to accomplish the things I want to do		
63.	In the future, I expect to succeed in what concerns me the most		
64.	My future seems dark to me		
65.	I happen to be particularly lucky, and I expect to get more of the good things in life than the average person		
66.	I just can't get the breaks, and there's no reason I will in the future		
67.	My past experiences have prepared me well for the future		
68.	All I can see ahead of me is unpleasantness rather than pleasantness		
69.	I don't expect to get what I really want		

70.	When I look ahead to the future, I expect that I will be happier than I am now		
71.	Things just don't work out the way I want them to		
72.	I have great faith in the future		
73.	I never get what I want, so it's foolish to want anything		
74.	It's very unlikely that I will get any real satisfaction in the future		
75.	The future seems vague and uncertain to me		
76.	I can look forward to more good times than bad times		
77.	There's no use in really trying to get anything I want because I probably won't get it		

We have come to an end of our questionnaire.

Thank you for your time and participating in the study.

APPENDIX III

ETHICAL APPROVALS

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

23 August 2023

Hloniphile Assistance Khuzwayo (210512965)
School Of Applied Human Sc
Howard College Campus

Dear HA Khuzwayo,

Protocol reference number: HSSREC/00000608/2019
Project title: An investigation into the relationship between depression and suicidal ideation among adult female offenders in a correctional facility in South Africa: intervening roles of hopelessness and social support
Degree: PhD

Approval Notification – Full Committee Reviewed Protocol

This letter serves to notify you that your response received on 17 August 2023 to our letter of 12 November 2019 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**

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

This approval is valid for one year until 23 August 2024
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours faithfully

[redacted]

.....
Professor Dipane Hlalele (Chair)

/dd

Humanities & Social Sciences Research Ethics Committee
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Tel: +27 31 260 8350 / 4557 / 3587
Website: http://research.ukzn.ac.za/Research-Ethics/

correctional services
Department:
Correctional Services
REPUBLIC OF SOUTH AFRICA

Private Bag X136, PRETORIA, 0001 Poyntons Building, C/O WF Nkomo and Sophie De Bruyn Street, PRETORIA
Tel (012) 307 2059 Fax 086 539 2693

Dear Ms HA Khuzwayo

RE: AN INVESTIGATION INTO THE RELATIONSHIP BETWEEN DEPRESSION AND SUICIDAL IDEATION AMONG ADULT FEMALE OFFENDERS IN A CORRECTIONAL FACILITY IN SOUTH AFRICA: INTERVENING ROLES OF HOPELESSNESS AND SOCIAL SUPPORT.

It is with pleasure to inform you that your request to conduct research in the Department of Correctional Services on the above topic has been approved.

Your attention is drawn to the following:

- This ethical approval is valid from **31/10/ 2023 to 31/10/2024.**
- The relevant Regional and Area Commissioner where the research will be conducted will be informed of your proposed research project.
- **Your internal guide is Director: Personal Development and Care.**
- It is your responsibility to make arrangements for your interviewing times.
- Your identity document/passport and this approval letter should be in your possession when visiting regional offices/Correctional Centers.
- You are required to use the terminology used in the White Paper on Corrections in South Africa (February 2005) and Correctional Services Act (No.**111** of 1998) e.g. "Offenders" not "Prisoners" and "Correctional Centres" not "Prisons".
- You are not allowed to use photographic or video equipment during your visits, however the audio recorder is allowed.
- You are required to submit your final report to the Department for approval by the Commissioner of Correctional Services before publication (including presentation at workshops, conferences, seminars, etc.) of the report.
- Should you have any enquiries regarding this process, please contact the REC Administration for assistance at telephone number (012) 307 2059. / 0723271937

Thank you for your application and interest to conduct research in the Department of Correctional Services.

Yours faithfully,

[redacted]

ND MBULI
DC: POLICY COORDINATION & RESEARCH
DATE: 31/10/2023