

(D)

Psychosocial pathways to recidivism-risk among offenders in correctional centres in Eswatini: A mediation study

WF Tsabedze orcid.org/0000-0002-6845-1460

Thesis accepted for the degree Doctor of Philosophy in Health Sciences with Psychology at the North-West University

Promoter: Prof ES Idemudia

Graduation: May 2021

Student number: 21402183

DECLARATION

I, Wandile Fundo Tsabedze, declare that the Thesis titled "Psychosocial pathways to recidivism risk among offenders in correctional centres in Eswatini: A mediation study", hereby submitted for the degree of Doctor of Philosophy in Psychology at the North-West University, has not previously been submitted by me for a degree at this or any other institution. I further declare that this is my own work in design and execution and that all materials contained herein are accordingly acknowledged by means of complete references.

Warbo Sze

Wandile Fundo Tsabedze

09 September 2020

Date

DEDICATION

I dedicate this study to my late mothers (Khetsani, Queen and Ntombifuthi) and late grandfather Mfanawephi Robert Dlamini. Thank for your support through all my studies.

ACKNOWLEGEMENTS

To Almighty God, you are my strength and wisdom, no human being can match your strength. I appreciate you and thank you for giving me knowledge and for making me who I am today. Thank you for your blessings.

- Professor Idemudia, I want to thank you for your remarkable support, persistence, thoughtfulness, guidance, believing in me when I did not believe in myself and most of all being patient during supervision hours. Without your guidance, this would have been difficult to achieve. May the Lord God bless you.
- I thank my grandmothers Girly and Lindiwe Dlamini for supporting me through my studies. I would have not got to this level without their love, guidance and support.
- Special mention of the following bursaries that made my academic years easier and paid my fees;
 NWU-Post Graduate and the Health Sciences Faculty Bursary.
- To my siblings: Victor, Simphiwe, Keitumetsi, Nazo, and Kelly; thank you so much for all your support and advice you gave me when things were tough. God bless you.
- To my friends: Siboniso Gumendze, Fezile Mabuza, Mzwandile Masondo, Mlondzi Nkambule,
 Thobile Ntjalintjali, Sifiso Shabangu and Constance Singo; thank you for your understanding and
 guidance throughout the years and giving me courage to finish this study. You mean a lot to me.
- His Majesty's Correctional Service in the Kingdom of Eswatini; thank you for granting the permission to conduct this study. The participants from all the correctional centres, I appreciate your participation in the study. Without your cooperation, the study was not going to take place. *Nkhulunkulu Anibusise* God bless you all.
- Thank you to all the staff members of the Department of Psychology (Ipelegeng Child Centre), who contributed to the completion of this study; Prof C. Oduaran, Prof K. Koen, Dr P. Erasmus, Dr R.G. Pila-Nemutandani, Mr S. Boshomane, Mr T.S. Manangela, Ms G.L. Mokwena, Miss M. Erasmus and Ms Mokgatle.
- A special thanks to the secretary of the Psychology Department, Miss Mogotsi, who has been the pillar of my strength and support when I had challenges during this study.

LETTER OF CONSENT

I, the undersigned, hereby give consent that Wandile Fundo Tsabedze, student number 21402183 may submit the thesis titled "Psychosocial pathways to recidivism risk among offenders in correctional centres in Eswatini: A mediation study" for the purpose of examination for the degree of Doctor of Philosophy in Psychology

Professor E.S. Idemudia

Abstract

Background: Recidivism risk has become one of the most serious social problems that have gained significant attention from social and behavioural scientists. Relapse into criminal behaviour among released inmates is a significant concern in developing countries due to lack of knowledge on how to prevent such behaviour. This study focuses on the influence of personality and social support on recidivism risk among offenders. In addition, it investigates the mediating roles of mental health, forgiveness, spirituality and religiosity on the associations of personality traits and social support with recidivism risk.

Methodology: This study used a cross-sectional research design. To select the five correctional centres the MULTI-Staged sampling technique was used and purposive sampling technique was used to select 244 offenders {192 (78.69%) males; 52 (21.31%) females; mean age= 31.61, SD=8.27} in five correctional centres. Structured instruments were used to collect data, comprising demographic variables, Eysenck Personality Questionnaire, Berlin Social Support Scales, Forgiveness Scale, Spirituality Well-Being Scale-revised, 10-Item Hoge Intrinsic Religiosity scale, General Health Questionnaire and Brief Assessment for Recidivism-risk. Six hypotheses were tested using structural equation modelling (SEM). **Results:** Among personality factors, only neuroticism ($\beta = -.13$, p = .02) significantly predicted recidivism risk, while extraversion ($\beta = .05$, p = .33) and psychoticism ($\beta = -.06$, p = .27) did not. Instrumental support ($\beta = .20$, p = .03) significantly predicted recidivism risk while emotional support (β = .02, p = .85), need support ($\beta = -.07$, p = .33) and support seeking ($\beta = -.05$, p = .47) did not. The direct influence of neuroticism ($\beta = -.10$, p = .23), instrumental support ($\beta = .11$, p = .08) and mental health (β = -.08, p = .35) were not significant on recidivism risk. An increase in neuroticism predicted an increase in poor mental health while an increase in instrumental support predicted a decrease in poor mental health. Outcomes of mediation analysis indicate that mental health, forgiveness, spirituality and religiosity did not mediate the association of instrumental support and neuroticism with recidivism risk. All models met the acceptable criteria for model fit. Results of mediation analysis suggest that standardized total effect of neuroticism on recidivism risk was significant ($\beta = -.14$, p = .026). The standardized total effect of instrumental support on recidivism risk was not significant (β = .12, p = .067). The fit statistics met the acceptable criteria for model fit, $\chi^2(1)$ = 2.74, p = .10; CFI = .94; RMSEA = .08 [90% CI = (.00, .21)], SRMR = .03.

Conclusion: It is established, that neuroticism and instrumental support are significantly associated with recidivism risk among offenders. However, mental health, forgiveness, spirituality and religiosity did not have mediating effects on these associations. It is important that psychologists, social workers and chaplains help the offenders in therapy to reduce the recidivism risk among offenders by considering offenders' personality and experience of social support.

Keywords: Correctional centres, mental health, offenders, psychosocial and recidivism risk

LIST OF TABLES

- **Table 4.1**: The administrative and geographical regions of Eswatini
- Table 5.1a: Summary of correlations among recidivism risk, independent and control variables
- **Table 5.1b:** Summary of correlations between recidivism risk and mediating variables
- Table 5.1c: Summary of correlations between independent and mediating variables
- **Table 5.2:** Summary of direct effects of personality factors on recidivism risk
- Table 5.3: Summary of direct effects of social support on recidivism risk
- **Table 5.4:** Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through mental health
- **Table 5.5:** Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through forgiveness
- **Table 5.6:** Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through spirituality
- **Table 5.7:** Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through religiosity

LIST OF FIGURES

- Figure 1: Conceptual Model of Psychosocial pathways to recidivicm risk among offenders in
 - correctional centres in Eswatini: A Mediation Study
- Figure 4.1.1 Distribution of participants according to gender
- Figure 4.1.2: Distribution of participants according to age
- Figure 4.1.3: Distribution of participants according to education level
- Figure 4.1.4: Distribution of participants according to marital status
- Figure 4.1.5: Distribution of participants according to duration of imprisonment
- Figure 4.1.6: Distribution of participants according to type of crime
- **Figure 5.1:** Direct effect of personality factors on recidivism risk controlling for demographic variables
- **Figure 5.2:** Direct effect of social support dimensions on recidivism risk controlling for demographic variables
- **Figure 5.3:** Mental health mediating the relationships of neuroticism and instrumental support with recidivism risk
- **Figure 5.4:** Forgiveness mediating the relationships of neuroticism and instrumental support with recidivism risk
- **Figure 5.5:** Spiritualty mediating the relationships of neuroticism and instrumental support with recidivism risk
- **Figure 5.6:** Religiosity mediating the relationships of neuroticism and instrumental support with recidivism risk

LIST OF APPENDICES

Appendix A: Ethical Clearance Certificate

Appendix B: Demographic Questionnaire

Appendix C: Eysenck Personality Questionnaire

Appendix D: Berlin Social Support Scales (BSSS)

Appendix E: The Forgiveness Scale

Appendix F: Forgiveness-likelihood Scale

Appendix G: Spirituality Well-Being Scale

Appendix H: 10-Item Hoge Intrinsic Religiosity Scale

Appendix I: The scaled General Health Questionnaire

Appendix J: Recidivism-risk Scale

Appendix K: Informed consent form (English and Siswati Version)

Appendix L: Interpretation letter

Appendix M: Letter to correctional services seeking permission

Appendix N: Permission letter from correctional centre

Appendix O: Approval of documents submitted during the progress of the study

LIST OF ABBREVIATIONS

AA - Alcoholics Anonymous

ASPD - Antisocial Personality Disorder

BET - Bronfenbrenner Ecological Theory

BPD - Borderline Personality Disorder

CD - Conduct Disorder

DSC - Differential Social Control

DSM - Diagnostic Statistical Manual

GHQ - General Health Questionnaire

ICF - Informed Consent Forms

NJI - National Institute of Justice

NPD - Narcissistic Personality Disorder

OMS - Offender Management System

OPD - Offender Personality Disorder

PEN - Psychoticism Extraversion Neuroticism

SEM - Structural Equation Model

SLT - Social Learning Theory

SPD - Schizoid Personality Disorder

Table of Contents

Declaration	ii
Dedication	iii
Acknowledgements	iv
Letter of consent	V
Abstract	vii
List of tables	viii
List of figures	ix
List of Appendixes	Х
List of Abbreviations	xi
CHAPTER ONE	1
1. INTRODUCTION	1
1.1 Problem statement	6
1.2 Aims and objectives of the study	10
1.3 Hypotheses	10
1.4.11 Recidivism:	12
1.4.12 Offender:	13
1.4.13 Correctional centre:	13
1.5 Significance of the study	
1.6 Scope of the study	14
CHAPTER TWO	15
THEORETICAL FRAMEWORK AND PERSPECTIVE	15
2.1 Theoretical framework	15
2.1.1 Social Learning Theory in criminology	15
2.1.2 Man's search for meaning theory	16
2.1.3 Theoretical perspectives	18
2.2.1 Personality Theory	18

2.2.2 Social Cognitive Theory	21
CHAPTER THREE	24
REVIEW OF RELATED EMPIRICAL STUDIES AND HYPOTHESES	24
3.2 Personality and recidivism risk behaviour among offenders	28
3.3Social support and recidivism-risk among offenders	30
3.3 Forgiveness and recidivism risk	31
3.4 Spirituality, Religiosity and recidivism risk among offenders	33
3.5 Mental Health and recidivism among offender populations	35
3.6 Gender, age, types of crime, and duration of imprisonment to recidivism risk of offenders	38
3.6Type of crime and recidivism risk	39
3.7 Frequency of offending and recidivism risk	39
3.8 Summary and the Identified Gaps in Literature	40
CHAPTER FOUR	41
RESEARCH DESIGN AND METHODOLOGY	41
4.1 Research design	41
4.3 Participants	41
4.5 Procedure for data collection	49
4.6 Instruments and psychometric properties	51
4.6.1 Demographic questionnaire	52
4.6.2 Brief Assessment for Recidivism risk	52
4.6.3 Eysenck Personality Questionnaire (EPQ)	53
4.6.4 Berlin Social Support Scales (BSSS)	53
4.6.5 The Forgiveness Scale	54

4.6.6 The Forgiveness Likelihood Scale	55
4.6.7 Spirituality Well-being Scale	55
4.2.8 Ten (10) Item Hoge intrinsic religiosity scale	55
4.2.4.9 The scaled General Health Questionnaire	Error! Bookmark not defined.
4.3 Statistical methods and analysis	56
CHAPTER FIVE	58
RESULTS	58
5.1 Introduction	58
5.2 Correlation / relationship test of the study variables	58
5.3 Correlations Analyses	59
5.3 Hypotheses (one (1) to six (6)) testing	63
5.3.1 Hypothesis One:	63
5.3.2 Hypothesis two:	64
5.3.3 Hypothesis three:	65
5.3.4 Hypothesis four:	67
5.3.5 Hypothesis five:	69
5.3.6 Hypothesis six:	71
CHAPTER SIX	74
DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS	74
6.1 Introduction	74
6.2 Conclusion	81
6.3 Recommendations	81
6.4 Implications of the study	83

6.4.1 Practical implications	83
6.4.2 Theoretical implications	83
6.4.3 Methodological implications	83
6.5 Strengths of the study	84
6.6 Limitations of the study	84
REFERENCES	86
APPENDICES	105
Appendix A: Ethical Clearance Certificate	105
Appendix B: Demographic Questionnaire	108
Appendix C: Eysenck Personality Questionnaire	110
Appendix D: Berlin Social Support Scales (BSSS)	112
Appendix E: The forgiveness scale	114
Appendix F: Forgiveness likelihood scale	115
Appendix G: Spirituality Well-Being Scale	117
Appendix H: 10-Item Hoge intrinsic religiosity scale	118
Appendix I: The scaled General Health Questionnaire	119
Appendix J: Recidivism-risk scale	109
Appendix K: Informed consent form (English and Siswati Version)	121
Appendix L: Interpretation letter	139
Appendix M: Letter to correctional seeking for permission	140
Appendix N: Permission letter from correctional centre	142
Appendix P: Recruitment poster	145

CHAPTER ONE

1. INTRODUCTION

As a developing country, Eswatini, formerly known as Swaziland, is still facing a number of challenges that need to be prioritised, such as the high level of crime leading to the establishment of twelve correctional centres in the country. It is a well-known fact that the occurrence of crime has a harmful impact on growth and development in the Kingdom of Eswatini and the African continent at large. The Eswatini justice system may have come with strategies such as rehabilitation and reintegration of offenders to the community to prevent offenders from being at risk of being recidivists; however, this factor remains a concern to the country's economy on how recidivism risk can be addressed. Criminal acts that result in re-arrest, reconviction, or return to prison with or without a new sentence during a three-year period following the prisoners' release in Eswatini has become one of the common factors in the Eswatini correctional centres, and these have resulted from poverty or from offenders being exposed to recidivism risk in correctional centres.

Vitopoulos *et al.* (2018) define 'recidivism risk' as being at risk of a conviction for one or more new offences at any time during the period after the sentencing date associated with the original charge(s), or when being exposed to criminal behaviour. In the current study, recidivism risk is defined as an offender being at risk of becoming a recidivist after being exposed to a correctional setting. Recidivism risk is a highly predicting factor, which is of concern to jurisdictions, and many countries, use this for recidivism risk prevention in correctional centres (Hester, 2019). Recidivism refers to a person's return to criminal activity after release from a previous conviction. The National Institute of Justice (NJI), cited in Hawken *et al.* (2016), states that recidivism is measured by criminal acts that result in re-arrests, re-conviction, or return to prison with or without a new sentence during a three-year period following the prisoner's release. Offenders who are exposed to recidivism risk in correctional centres cause recidivism behaviour (Cacho Fernández, 2020).

Malindisa and Winterdyk (2015) indicate that psychosocial factors (social support, loneliness, marriage status, social disruption, bereavement, social status, and social integration) and socio-economic

factors (employment, education, and income) contribute to the high rate of crime and recidivism in developing countries around the world. Not showing the importance of any psychosocial and socioeconomic factors implies that offenders need intervention programmes, which will enhance the psychosocial factors (personality, social support, forgiveness, spirituality, religiosity, mental health) and mitigate the socio-economic factors (high unemployment rate, inequality and poverty). In support of the above, it is essential to note that these factors also contribute to how offenders will respond to the environment they are living in. Therefore, offenders who are exposed to the negative psychosocial and socio-economic factors are more likely to be recidivists; if there is positive exposure, they are less likely to be recidivists. Adu-Boateng (2019) supports that offenders are at risk of being recidivists because of poor rehabilitation programmes and the poor economy of a country. In addition, there are numerous key factors that disadvantage a country, such as financial stability in terms of trade relations, poor infrastructure development, poor education systems, poor poverty alleviation programmes and poor sustainable farming (Breetzke et al., 2019). The economy of a country can be negatively affected due to the high rate of crime and recidivism, and, as a result, the country fails to achieve its intended goals that have been established to improve the lives and safety of all its people, including the offenders (Short Jr, 2018).

There are theories that support that recidivism risk is a behaviour brewed by psychosocial factors. According to Akers (2017), the Social Learning Theory (SLT) with regard to crime and deviance suggests that crime and violence are learned behaviours, and a living lifestyle for offenders, thus leading to recidivism behaviour. This theory is supported by the model of Krohn *et al.* (1984), which is contextualised within a general personality and cognitive social learning theory of criminal conduct, largely based on prediction and risk assessment of correctional populations that accommodate dynamic criminogenic risk factors (gangs, poverty, rejection and mental illnesses).

However, the theory of Eysenck *et al.* (1985) states that criminal behaviour could be explained as a symptom of personality and environmental factors blended. Zuckerman and Glicksohn (2016) support the theory that all behaviour, including individual reactions to social factors such as poverty and

inequality, is unquestionably filtered through the individual's psyche. Carvalho (2019) reported that offenders with criminal behaviour show significantly more neuroticism, less openness and less conscientiousness. Personality traits are believed to be involved in the aetiology and maintenance of criminal behaviour. Such traits are known as stable dynamic factors (i.e. aggressor's persistent psychosocial characteristics) and play a major role in the risk assessment of offenders (Tyrer *et al.*, 2019). Despite specific personality profiles which have been related to offenders, they are still considered a highly heterogeneous population in terms of personality features. Similarly, Johnson (2019) reported that offenders with violent personality traits are more likely to be at risk of recidivism, more especially those diagnosed with Narcissistic Personality Disorder (NPD), Borderline Personality Disorder (BPD), and Schizoid Personality Disorder (SPD).

Social support may also predict recidivism risk in correctional centres. Dickson (2014) states that stressful and unsafe conditions in correctional centres and absence of social support increase the rate of offenders' recidivism. In addition, Polaschek and Wong (2020) reported that, because newly-released offenders do not have resources such as work and a place to live, they are much more likely to fall back into criminal behaviour. Moreover, social support and recidivism- risk interventions are needed within correctional centres since, after release from correctional centres, recidivists rely on loved ones for instrumental forms of social support such as housing, clothing, food, child-care, transportation, and financial and employment assistance (Pettus-Davis & Epperson, 2015). Therefore, if social support is not pre-arranged for offenders, they are more likely to be at risk of recidivism.

Further, forgiveness is a two-way tributary, which means that both offender and victim have to forgive each in order to avoid the risk of re-offending. The body of literature on lack of forgiveness is widespread, complicated, and at times, difficult to integrate. Among the many different aspects of the hypothesis that the current study discusses is its definition, as there is no current consensus on this matter. Subkoviak *et al.* (1995) mention that forgiveness is characterised as an active response to transgression, which includes cognitive, emotional and at times behavioural reactions, which may be regretted and lead to imprisonment. Therefore, a victim has a right to be angry and resentful towards the transgressor.

The current study examines forgiveness by assessing offenders' willingness to reconcile with the victim, and forgiveness as a dispositional tendency that would dispose an offender to be forgiving or unforgiving over time and across different circumstances. For instance, is the offender willing to forgive, because some offenders perceive themselves as victims and fail to forgive, which leads to recidivism risk? According to Mooney *et al.* (2016), offenders who feel guilt are more likely to forgive and not be recidivists. However, those who do not feel guilt are more likely to be at risk for recidivism, since they are more likely not to forgive and to commit the same offence again, or even a more serious offence such as murder or rape.

According to Barnes and Haddad (2020), forgiveness is conceptualised as a reduction of critical and disciplinary feelings towards someone who has done or is believed to have done harm to another. Forgiveness is a mediating variable between the psychosocial factors (personality and social support) which can be delivered effectively to offenders with personality and social support issues in clinical settings in order to reduce recidivism-risk among offenders (Mela *et al.*, 2017). Its range of benefits include reduction in anger as well as improved capacity to forgive, which may have longer term implications for personal safety and reintegration into the mainstream societal settings of offenders.

Spirituality and religiosity are assessed in the current study. Stansfield *et al.* (2017) posit that spirituality and religiosity help offenders address their criminogenic needs. In addition, they are important responsivity factors, which are overlooked in criminological theory and practice. Spirituality and religiosity are important theoretical and practical variables in current efforts to develop successful pathways to reduce recidivism in correctional centres. Moreover, Duncan *et al.* (2018) reported that during incarceration, there is an overall significantly positive impact of spirituality and religiosity involvement on recidivism risk during the first year after release and over a 13-year follow-up period after the release from the correctional centre among offenders. In addition, spirituality and religiosity were reported by Bhutta *et al.* (2019) to be significant in predicting the recidivism risk of the offenders and they played a role in reducing the recidivism risk in correctional centres. This suggests that, when offenders are provided with spiritual and religiosity support, they are more likely to be rehabilitated.

Yoder et al. (2017) reported that correctional centres offer anger management classes as well as addiction programmes like Alcoholics Anonymous (AA), but few mental health programmes are designed specifically with recidivists' needs in a psychological perspective in correctional centres. Therefore, mental health treatment for incarcerated offenders is pharmaceutical, which is focused more on controlling problematic behaviour than on improving symptoms by addressing root causes among offenders to decrease the rate of recidivism (Wilson, 2018). Furthermore, Ferracuti et al. (2020) reported that mental health challenges may lead to changes in personality and compromise behaviour, even leading to conditions of criminal behaviour. This suggests that offenders with personality disorders, such as antisocial disorder, are predicted to be a violence risk, which is a high factor of recidivism risk. Offenders with such challenges are in need of assistance before release (for example, arrangements for after-care discharge from the correctional centre). In addition, a research by Rubino et al. (2020) reported that a large-scale evaluation of the patterns of recidivism among offenders as a function of mental health diagnosis over a 4-year period showed a relationship was identified in individuals with mental illness, and reported that 10 % of arrestees within the jurisdiction were recidivists diagnosed with mental illness. Lastly, mental health mediates between personality, social support and recidivism risk to avoid recidivism behaviour.

Social-demographic factors are introduced in the study as the controlling variables; gender, age, type of crime, duration of imprisonment, education and marital status. According to Matshaba (2017) social-demographic factors influence the recidivism risk behaviour of offenders; for instance an offender, male, 35 years old, who has committed rape, sentenced to 18 years of imprisonment, not educated, and married is more likely to be at risk of being a recidivist. It infers being male is related to violent behaviour in communities. However, Steyn and Booyens (2017) reported that a reasonable proportion of female offenders serve sentences for property and economic crimes, in particular theft and shoplifting, compared to males serving sentences for capital crimes, for instance murder and rape. Moreover, Davis (2016) and Ho *et al.* (2020) argue that when comparisons between male and female offenders are made in respect of their profiles as well as the pathways to incarceration, women, including

girls, illustrate multiple histories of victimisation or abuse within the home, are more likely to be less educated and are therefore less skilled than their male counterparts. Social-demographic factors are introduced in the study as the controlling variables; gender, age, type of crime, duration of imprisonment, education, and marital status. According to Cassidy (2020), gender, age, type of crime, duration of imprisonment, education and marital status determine offenders' recidivism behaviour.

When the results of the above studies are integrated, they appear to weakly confirm Baron and Kenny's (1986) conditions for ascertaining mediation. However, there is a need to empirically demonstrate the mediation roles of forgiveness, spirituality, religiosity and mental health on the influences of recidivism risk, as these influence offenders' behaviour which may lead to a lower or higher rate of recidivism risk behaviour among offenders (Stewart, 2019); a gap the present study was predicated to fill.

1.1 Problem statement

Chioda (2017) states that the rate of recidivism currently stands at 22% within the twelve correctional centres in Eswatini. Predictably, this rate is expected to increase with pervasive effects on individuals and the society. In Eswatini, there is an inadequate amount of knowledge regarding the recidivism risk because little or no research has been done on recidivism risk among offenders, and the role which reintegration and rehabilitation programmes offered to offenders of crime could play with regard to limiting this high rate. Moreover, it is a worrying factor that offenders are not prepared for life awaiting them in the social world and lack the much-needed assistance and encouragement to succeed (van der Put, 2020). Thus, when offenders are released, they often leave with the same criminogenic needs and deficiencies with which they first arrived, and leave in an even worse state. This implies that the offenders were not well rehabilitated when reintegrated to the community, which causes emotional stress to the families or communities they are released into, because the justice system has reintegrated a person who is not going to bring change in the community but a problem, which will lead to recidivism.

Considering the above highlighted factors, there is therefore a need to identify the some of the worrisome factors that potentially contribute to the engagement of Emaswati in criminal acts. Eswatini

has been known as one of the leading countries in the world when it comes to HIV/AIDS according to Magagula and Hofisi (2018) and ACBR (2017), leaving the country with a high rate of crime. The above statement means that many families are child-headed by orphans, which has led young children to engage in criminal activities for them to be able to live. When exposed to correctional centres, their basic needs such as shelter, food and toiletries are provided free of charge, and they are not exposed to the effects of poverty. In this way, a correctional centre becomes a centre of survival; then first offenders become recidivists.

Due to the country's dark history of the HIV/AIDS pandemic, research has been localized to this area. Consequently, other areas such as crime, recidivism risk, forgivness, spirituality, religiosity and mental health and the correctional population of Eswatini are severely under-researched in this context (Motsa & Morojele, 2017). Moreover, in support of the above statement to decribe the Eswatini situation, there has been a high rate of unemployment. The country has not been employing people from the year 2016 until now (2020). There has been no employment of any civil servant; for example nurses, doctors, teachers, police officers, correctional officers, soldiers or any other professional, as no ministry has been hiring. This implies that there will be increase in the rate of crime due to poverty, yet the country has already been in the grip of poverty. Therefore, correctional centres will be flooded with offenders due to the high rate of crime. In such a state this shows a vicious cycle, and with no prevention but to reduce the high rate of recidivism.

Official statistics regarding recidivism in South Africa, the neighbouring country of Eswatini, are estimated to be between 55% and 97%, while those for Eswatini for 2016–2019 are estimated to be between 50% and 90%, which suggest that most offenders recidivate (Villaseñor, 2020). The above statistics indicates that there is high proportion of the economy being invested in the justice system of Eswatini, to make sure that the process of rehabilitation is executed without fail, from the arrest of the offender until the reintegration stage, and this process negatively affects the economy of the country. Yet, despite the challenges related to readjustment to society and the high rates of recidivism, on the contrary some few former offenders do manage to successfully reintegrate into society (Feminist Criminology, 2020).

Walters and Espelage (2018) maintain that little is known about positive psychological factors that may successfully mitigate recidivism of ex-offenders in the South African context, which, in one way or another, will benefit other countries around South Africa, such as Eswatini. In the South African and Eswatini context, programmes to reduce recidivism risk and encourage rehabilitation are limited due to the lack of resources in correctional facilities (Kheswa & Lobi, 2014). This shows the gap, as the Eswatini rehabilitation programmes do not address issues such as psychosocial, socio-economic, spirituality and religiosity; hence the study will examine these factors to influence policy implementations and the practice of these systems.

Personality traits, as one of these psychosocial factors, play an important role in individuals' behaviour. Aggressiveness behaviour (also characterised by reckless and impulsive behaviour) is a common element which leads to a high rate of crime and recidivism due to the fact that most offenders fail to control anger, therefore offenders become assault recidivists (Wormith *et al.*, 2020).

A study by Christodoulou *et al.* (2019)showed lack of support from poorly functioning families has been strongly linked to offenders' problematic behaviour and subsequent recidivism. However, Moore and Bergner (2016) noted that there is little understanding as to the extent that social support may act as a predicting factor for offenders' recidivism risk behaviour in Eswatini. Offenders from developing countries such as Eswatini may be receiving little or no social support from communities and families because of the rising poverty level. In addition, incarceration can socially isolate offenders from sources of support. Unfortunately, Emaswati experience this lack of social support. It is not easy to reintegrate an offender who has offended a family or community. Such offences lead to stigmatization and that will cause the offender to feel socially isolated and may lead to recidivism, because the offender will find a sense of belonging in the correctional centre or setting. Given the scarcity of studies linking personality factors and social support with recidivism in Eswatini, the current study will fill this gap by examining the predictive abilities of personality traits and social support on recidivism within the Eswatini context.

A significant mediating variable in the study is forgiveness, which plays a role in recidivism risk. According to Griffin *et al.* (2015), offenders scoring low on self-forgiveness, (which reduces self-

condemnation among offenders' interpersonal offences), leads to recidivism risk behaviour, therefore offenders are more likely to re-offend if they have not forgiven themselves and others. For example, offenders struggle to forgive those who have arrested them, as some offenders perceive themselves as victims. In addition, Ray *et al.* (2019) suggest that offenders' identification as a victim is one mechanism through which the trait of forgiveness relates to forgiveness of specific offences, and that leads to a high recidivism risk.

In addition, the rate of mental illnesses diagnosed in correctional centres is far higher than that outside of correctional centres, which is worrisome (Castillo, 2020). In support of the above research, Chen (2020) estimates that, based on DSM-V criteria, the rate of mental illnesses could be as high as 70% of the correctional centres' population, which is a very high risk for recidivism behaviour. Common mental illnesses in offenders include substance abuse disorder; post-traumatic stress disorders; major depression; and psychotic disorders. Necho (2020), states that social support and personality merge with mental health of offenders and predict the recidivism behaviour among offenders. This implies that there is a need for health care facilities in the country; however, the Eswatini Correctional Department has only one mental health centre, which can only accommodate a maximum of 40 offenders with no rehabilitation facilities. This imposes a concern, as there is a high possibility that most offenders will be recidivists, since there are no good health facilities that are taking care of their psychosocial needs.

There is a gap in the literature on the psychosocial pathways to recidivism risk among offenders in Eswatini correctional centres. For instance, a quantitative study by Duwe and King (2013) did not investigate the psychosocial pathways to recidivism among offenders in correctional centres in Eswatini, but only applied evidence-based practices that focused on providing a behavioural intervention within a therapeutic community. Nevertheless, mixed outcomes of recidivism risk and psychosocial pathways were explored by Stansfield *et al.* (2017) in a South African population, and revealed that psychosocial and exosystemic factors predict recidivism behaviour. For example, Darvyri *et al.* (2014) found evidence of spirituality improving behavioural and cognitive changes among offenders. However, the review of available studies showed that no empirical study has explored the mediating roles of forgiveness,

spirituality, religiosity and mental health in these relationships among offenders. This study will therefore, fill the void in research in this area.

1.2 Aims and objectives of the study

This study aims at examining the predictive roles of personality traits and social support on recidivism risk among offenders in some selected correctional centres in Eswatini. In addition, it investigates the mediating roles of mental health, forgiveness, spirituality and religiosity on the associations of personality traits and social support with recidivism risk.

The specific objectives are as follows:

- i. To examine the predictive role of personality traits on recidivism risk.
- ii. To assess the influence of social support on recidivism risk.
- iii. To examine the mediating role of mental health in the association of personality traits and social support with recidivism risk.
- iv. To determine the mediating role of forgiveness in the association of personality traits and social support with recidivism risk.
- v. To evaluate the mediating role of spirituality in the association of personality traits and social support with recidivism risk.
- vi. To examine the mediating role of religiosity in the associations of personality traits and social support with recidivism risk.

1.3 Hypotheses

The following hypotheses were tested in the study:

- i. Personality factors will directly predict recidivism risk of offenders;
- ii. Social support will directly predict recidivism risk of offenders;
- iii. Mental health will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk;

- iv. Forgiveness will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk;
- v. Spirituality will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk; and
- vi. Religiosity will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

1.4 Operational definition of concepts

- **1.4.1 Personality :** Eysenck *et al.* (1985) explain personality as that of an individual; three traits are psychoticism, extraversion, and neuroticism (P-E-N). Each individual has a different level of each trait; therefore, high scores represent a high composition of each of the EPQ dimensions within an offender.
- 1.4.2 Social support: This refers to offenders having and experiencing social support from the family and community while in the correctional centre or serving the sentence. In addition, the study seeks to measure cognitive and behavioural aspects of social support; to assess quantity, type, and function of social support in general and in stressful circumstances: to investigate dyadic support interaction in stressful situations. This was measured using the Schwarzer and Schulz scale (2000).
- **1.4.3 Forgiveness:** Forgiveness is the absence of negative responses toward an individual who has offended the next person. It is based on a conceptualization of forgiveness as the absence of both revenge and avoidance responses. It is measured using Rye and Pargament's scale (2002). The offender has to indicate how he would have responded to the person who has wronged or mistreated him.
- **1.4.4 Spirituality:** Refers to the holistic beliefs, intuitions, lifestyle choices, practices, and rituals representative of the human spiritual dimension. This is measured using Darvyri *et al.*'s scale (2014). The study will define spirituality as the condition of being concerned with matters of the human spirit (or soul) as opposed to the material.

- **1.4.5 Religiosity:** Religiosity is the condition of being excessively religious. The instrument assesses the three major dimensions of religiosity, which are organizational religious activity, non-organizational religious activity, and intrinsic religiosity (or subjective religiosity). These dimensions are measure by separate subscales, and correlations with health outcomes should be analysed by sub-scale in separate models. It is measured by Hoge's scale (1972).
- **1.4.6 Mental health:** It is a state of well-being in which an offender realizes abilities of coping with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. It is measured by Goldberg and Hillier's scale (1979).
- **1.4.7 Gender:** This is either of the two sexes (male and female), especially when considered with reference to social and cultural differences rather than biological ones.
- **1.4.8 Age:** The time of life at which some particular power or capacity is understood to become vested; as in the age of consent or the age of discretion.
- **1.4.9** Type of crime: Refers to the certain or specific crime which is committed by the offender.
- **1.4.10 Duration of imprisonment:** Refers to the period the offender has to spend incarcerated as a convict according to the law of the state.
- 1.4.11 Recidivism risk: Is to be at risk of a conviction for one or more new offences at any time during the period after the sentencing date associated with the original charge(s). Nonetheless, in the study, recidivism risk means that an offender is at risk to become a recidivist after being exposed to a correctional setting. For the scoring of the scale, an item score may be positive, zero, or negative. Each item has a description, which has an Offender Management System (OMS); if one of them applies to the offender, the value of the OMS is the score of the offender. If no description applies then the score value is zero. The OMS calculates an offender's total score by adding the 15 individual item scores together.
- **1.4.12 Recidivism:** Recidivism refers to re-engaging in criminal behaviour after receiving a sanction or an intervention (Spooner *et al.*, 2017). However, in this study, recidivism refers to individuals who have been arrested twice or more for either the same or a different offence.

- **1.4.13 Offender:** In this study, an offender refers to an individual who has committed a crime or has done a behaviour that is against the State law.
- **1.4.14 Correctional centre:** Correctional centre is an institution wherein offenders are corrected to be better citizens of the State, reconciled, reintegrated to the community, and rehabilitated.

1.5 Significance of the study

Currently, the majority of correctional centres in Eswatini do not have permanent psychological services, and psychiatric services are non-existent. There are two psychologists in the national psychiatric hospital servicing all eleven correctional centres in Eswatini. Thus, the study would assist government to realise the importance of hiring psychologists that are more qualified to provide psychological services for offenders, which could go a long way in decreasing the risk of recidivism.

This study would be of value not only to correctional practitioners, but also to the police and judiciary, in that they will have a better understanding of dilemmas faced by Eswatini correctional centres. This would be by assisting the police and judiciary to take informed decisions with regard to effective law enforcement, detention of awaiting-trial persons, remand, and sentencing practices.

Additionally, an effective direction to reduce recidivism risk is a pre-release programme. During a pre-release programme, a social worker and psychologist visit the homes of both the victim and the offender to prepare the families for the release of the offender. This helps the social worker and the psychologist to rate if the families are ready to forgive the offender because, if not ready, the offender is more likely to commit another crime and be re-admitted to the correctional centre.

Knowledge gained from this study would also assist correctional centres in terms of rehabilitating offenders, which could go a long way in reducing the rate of recidivism. The study will also assist health care practitioners (psychologists, social workers and counsellors) to understand the importance of forgiveness, spirituality, religion, social support, personality and mental health in reducing recidivism, and in the formulation of appropriate intervention strategies. The study will also assist policy makers in formulating policies to deal with recidivism risk. The study would also add to the literature about

recidivism risk among offenders in Eswatini. The study would create consciousness of spirituality programmes that would assists in decreasing the recidivism risk in Eswatini correctional centres, for instance, by giving sermons to encourage spirituality and provide comfort to offenders, or inviting different religions to give hope and meaning of life among offenders.

The present study would also provide methodological benefits. This is because the study will examine the mediating roles of forgiveness, spirituality, religiosity and mental health on the relationships of psychosocial factors (personality and social support), socio-demographic factors (gender, age, type of crime and duration of imprisonment) and recidivism risk through structural equation modelling (SEM) framework.

1.6 Scope of the study

The inclusion criteria for the study measured recidivism risk of all convicted offenders who are willing to take part in the study. All convicted offenders who were willing to be part of the study were included to measure the risk of becoming recidivists. Convicted adult offenders (aged 18 years and above, both males and females) who could speak and write English or SiSwati were considered for the study. All races were considered for the study. Furthermore, only convicted offenders were allowed to participate in the study, because those who are on remand are not guilty until convicted by the state law. The exclusion criteria are; being juvenile offenders and minors; non-Swati; and those awaiting trial or on remand.

CHAPTER TWO

THEORETICAL FRAMEWORK AND PERSPECTIVE

This chapter presents relevant theories explaining study variables in the context of recidivism risk. The following theories will be discussed under the theoretical framework; Social Learning Theory in criminology, and Man's Search for Meaning theory. In addition, the current study will discuss the following perspectives: Personality and Social Cognitive.

2.1 Theoretical framework

2.1.1 Social Learning Theory in criminology-Sutherland (1939) (cited by Akers et al., 1979)

According to Akers (2017), the Social Learning Theory (SLT) with regard to crime and deviance suggests that crime and violence are learned behaviours, and a living lifestyle for offenders, leading to the recidivism risk. This implies that offenders become recidivists if they have been exposed to criminal behaviour; they see and learn criminal behaviour through offenders who are their peers by engaging in risk behaviours such as gang membership and substance use in the correctional centre. This theory is supported by Krohn *et al.'s* (1984) model, which is contextualised within a general personality and cognitive social learning theory of criminal conduct, largely based on prediction and risk assessment of correctional populations that accommodate dynamic criminogenic risk factors that are indicators for treatment and risk reduction, and a means to achieve broader social integration. This theory corroborates SLT by stating that the environment influences criminal conduct. In addition, McKinley *et al.* (2018) argue that SLT leads to the neglecting of theoretical developments in the aetiology of deviant behaviour among offenders, in addition, labelling and conflict perspectives, highlighting minorities and how they are disadvantaged. However, none of these perspectives have offered a general explanation of deviant behaviour, although some conflict theorists have offered preliminary results, but there are incomplete efforts in the direction of recidivism risk behaviour.

However Steyn and Louw (2012) explain how rehabilitation programmes for offenders can attain a healthy personality, increased social support, mental health, forgiveness and spirituality and religiosity

to avoid recidivism-risk among offenders. Akers (2017) maintains that healthy personality, social support, forgiveness, spirituality, religiosity and mental health could be promoted among offenders through support from their families and the community to prevent recidivism. Singh (2016) agrees that social support activities that are subjectively perceived as overwhelming, such as a high support course, enhance mental health and reduce recidivism-risk behaviour. However Eisenbarth *et al.* (2018) and Osher and Thompson (2020) state that rational choice models of crime have been expanded beyond the basic expected utility proposition to include family and peer influences, moral judgments, personality, social support, forgiveness, spirituality, religiosity and mental health.

The Social Learning Theory of Krohn et al. (1985) states that deviant behaviour among offenders is the product of differential association. For instance crime and deviance that holds offenders to pursue criminal or deviant behavior to the extent that they identify themselves with real or imaginary people, from whose perspective their criminal or deviant behaviour seems acceptable, leads to recidivism behaviour (Akers, 2017).

This theory is relevant to the present study because it highlights that personality is influenced by observation according to an individual's social sphere. It also highlights that social support, forgiveness, and mental health correlate with criminal behaviour of offenders, which may put offenders at risk of becoming recidivists. The main concept in this theory is that learning occurs by individuals observing others, especially peers, who in a correctional centre are fellow offenders. For example, if joining a gang in the correctional centre is the only way to survive, it is possible that offenders will be bound to be at risk of recidivism due to the criminal deviant behaviour they are exposed to in the correctional centre. Hypothetically, this theory blends behavioural concepts of reinforcement and punishment with cognitive concepts of awareness and expectations among offenders.

2.1.2 Man's search for meaning theory - Frankl (1984)

Addad (1987) indicated that Frankl's (1970) theory of logotherapy assumed that the search for meaning and existential substance are primary human forces and not simply a rationalization of instinctive impulses. In this light, the more psychogenic neuroticism grows, the further a person loses

full awareness of his life's mission. Conversely, the further a person loses full awareness of his life's mission, the higher his psychogenic anxiety (neuroticism) will be. It follows then that the less the neuroticism, the more awareness a person will have about the meaning of life. According to Adler's conception, criminality provides the individual with a sense of control and can serve as a substitute for existential meaning, thus providing an outlet for meaning in life. In a population of criminals, then, one might expect to find a high level of neuroticism and a low expression of meaning in life.

Frankl's radically positive message of re-humanizing psychotherapy is much-needed in the current study to show the importance of psychosocial rehabilitation programmes to be offered to offenders. Logotherapy, according to Schulenberg *et al.* (2008) is a meaning-seeking model that helps with practical intervention programmes. This theory would assist hypothetically by showing that the mediating variables listed below are essential for offenders to lower the level of recidivism risk.

- (i) Forgiveness: The will for self-forgiveness and of those who have wronged you
- (ii) Spirituality: meaning a spiritual and primary motivation for the overcoming of the limits of the individual self and desires in spiritual contemplation and realization;
- (iii) Religiosity, which is religious self-care, which will enhance meaning in life and well-being, even when other pathways to well-being are not available. Additionally, religiosity has the belief that the intrinsic meaning and value of life, regardless of circumstances, is more functional than alternative beliefs. Lastly,
- (iv) Mental health which indicates that a meaning mindset, as compared to the success mindset, leads to greater meaningfulness, compassion, moral excellence, and eudaemonic happiness.

Moreover, Frankl (1984) maintains that Freedom of Will is essential for offenders who believe in the inherent human capacity for freedom and responsibility, regardless of circumstances. Those who have freedom of will show higher autonomy and authenticity than those without such beliefs, who will end up being at risk of recidivism.

The importance of this theory is that a man's search for meaning is more likely to be discovered through forgiveness, spirituality, religiosity and mental health by offenders who are motivated by self-transcendence rather than by self-interest. Together, these factors (forgiveness, spirituality, religiosity and mental health) capture the complexity and centrality of meaning-seeking in healing and well-being. In sum, this theory emphasizes the need for a radical shift from self-focus to meaning-focus as the most promising way to lift up individuals from the dark pit of despair to a higher ground of flourishing. Lastly, this theory shows that recidivism risk is a choice; it is the offenders' capability to not be at risk of being a recidivisist. This implies that offenders have the potential to go beyond their limit and and have Freedom of Will. Frankl's (1984) theory states that for an individual to be shaped, personality has to find freedom of will and meaning in life, therefore this theory supports the importance of the personality trait variables in the study, because for offenders not to be at risk to recidivism, they have to find meaning in life and have freedom of will.

2.2 Theoretical perspectives

2.2.1 Personality Theory - Eysenck et al. (1985)

Eysenck's theory states that criminal behaviour can be explained as a symptom of personality and environmental factors in combination (Eysenck, 1996). This theory is supported by Zuckerman and Glicksohn (2016), who explain that all behaviour, including individual reactions to social factors such as poverty and inequality, is indisputably filtered through the individual's psyche. However Eysenck (2017) argues that inquiries into psychological explanations for crime cannot be dismissed in recidivism behaviour. In Eysenck's view, three independent dimensions govern personality: psychoticism, extraversion, and neuroticism, which also guide offenders' behaviour to be either good or bad. Conversely, Thompson and Morris (2016) argue that previous results on the predictive qualities of Eysenck's model have been varied, but show that there is a significant correlation between different traits and offending. Regarding recidivism, a study conducted by Eysenck indicated that neuroticism showed little relevance, but that extraversion, neuroticism and psychoticism appeared to be the better combination of predictors of recidivism-risk (Gottfredson, 2016).

According to extraversion in Eysenck et al. (1985), conceptualisation is the opposite of introversion. Eysenck describes an extrovert as a person who likes parties, does not like reading or studying by himself or herself, craves excitement, takes chances, is fond of practical jokes, is carefree and easy-going, optimistic, and tends to be aggressive and loses his temper quickly. The typical introvert, on the other hand, is a person who is quiet, introspective, distrusts the impulse of the moment, likes a well-ordered mode of life and "keeps his feelings under close control, seldom behaves in an aggressive manner, and does not lose his temper easily." A person with a high neuroticism score tends to experience higher levels of stress and anxiety. They worry about relatively insignificant issues, exaggerate their meaning, and feel unable to cope with stressors. A focus on the negative aspects of a situation rather than the positive aspects can make a person adopt a disproportionately negative perspective. They may feel envious or jealous of others who, according to them, are in a better position. On the other hand, a person with a low neuroticism score will generally experience greater emotional stability and for the most part, feel more capable of coping with stressful events and setting goals that are suited to abilities. A person with a low neuroticism score tend to be more tolerant of others' failures and remain calmer in demanding situations. Lastly, psychoticism; a person with higher psychotism is more likely to participate in irresponsible or poorly-calculated behviour, contravene accepted social norms and be motivated by a need for immediate gratification, regardless of its consequences. However, psychoticismn also has more positive association; for instance a person with a high psychoticism score tends to have more advanced creative skills, and high levels of psychoticism reduce a person's ability to respond to conditioning, which means that it would be harder to adapt to the social norms that we usually learn through reward and punishment.

Eysenck (1996) also argues that criminal behaviour can be explained, at least in part, in terms of conditioning. How a person is conditioned influences the 'conscience', which in turn governs behaviour. In an account of conditioning, Eysenck explains conditioning in terms of punishment and reward. Different acts are either punished or rewarded, forming the individual's experience of his behaviour

(Heritage *et al.*, 2018). Therefore, conditioning is a social practice, where behaviour is punished or rewarded by those around an individual, for instance parents, teachers and peers.

Furthermore, Eysenck presents three possible reasons why different people behave in socially acceptable ways to varying degrees. The first is that the individual has not been subjected to sufficient conditioning experiences. The second is that the 'wrong' experiences are reinforced in the individual. The third, which is of chief concern, is that the conditioning experience is relative to the subject's psychological traits. Moreover, Jamshidzad et al. (2018) argue that subjects high on the extraversion scale have greater problems aggregating conditional experiences into a functioning 'conscience' than subjects lower on extraversion, which may lead to recidivism risk. Hence, extraverted subjects possess less internal resistance to antisocial behaviour. Regarding the argument for extraversion and crime, results from experimental studies of conditioned responses have found evidence that antisocial subjects show lower conditioning compared with non-antisocial subjects. Kopetz et al. (2018) further reported that neuroticism is regarded as a personality trait on which offenders score high. The equivalent opposite of neuroticism is called 'stability' in Eysenck's terminology (Heritage et al., 2018). According to Cilliers et al. (2018), neuroticism is a state of emotionality or instability; an 'anxiety state' or a 'reactive depression', characterised by a marked sensitivity of situations, and a subjective experience of great exhaustion. Moreover Eysenck's theory refers to neuroticism as a combination of correlated affective disorders in which common symptoms are anxiousness, phobia, and obsessive or compulsive behaviour (Fetvadjiev et al., 2018).

Neuroticism functions by reinforcing behaviour until certain action tendencies become characteristic. It is influenced by a natural drive which makes subjects more persistent in offenders' behaviour (Eisenbarth *et al.*, 2018). Therefore, high levels of neuroticism predict antisocial behaviour by virtue of said drive properties, which can increase criminal action tendencies in the subject, who is therefore more likely to be at risk of recidivism.

The DSM-5 criteria for these disorders, as cited by Association (2000) are:

- (a) Narcissistic Personality Disorder a pervasive pattern of grandiosity (in fantasy or behaviour), need for admiration, and lack of empathy, beginning by early adulthood and present in a variety of contexts;
- (b) Borderline Personality Disorder a pervasive pattern of instability of interpersonal relationships, self-image, and affect, and marked impulsivity, beginning by early adulthood and present in a variety of contexts; and
- (c) Schizoid Personality Disorder a pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal settings, beginning by early adulthood and present in a variety of contexts.

Therefore, it is understandable that if a person meets the diagnostic criteria for any one of the above personality disorders, they have a higher likelihood of engaging in violence towards others. Many of the offenders may meet the diagnostic criteria for several personality disorders, and it is important to assess for all diagnoses for which the offender meets the criteria, not simply diagnosing one and leaving it at that. It is also important to note that an offender who meets any of the above diagnostic criteria may not necessarily engage in violence towards others.

The application of this theory in the current study is the relationship between neurotic traits and aggressiveness, and impulsiveness is an important contributor to the correlation with antisocial behaviour, which results in recidivism risk behaviour.

2.2.2 Social Cognitive Theory - Eysenck (1996)

Social Cognitive Theory (SCT) is a variant of the social learning theory (Bandura, 1986), which explains human behaviour in terms of a three-way dynamic and reciprocal model: personal factors, environmental influences, and behaviour. Therefore, Social Cognitive Theory makes concepts and processes from cognitive, behaviouristic, and emotional models of behaviour change, so it can be readily applied to counselling interventions for recidivism (Walters, 2018). A basic premise of SCT is that offenders learn

not only through their own experiences, but also by observing the actions of others and the results of those actions.

Similarly, the Differential Social Control (DSC) theory (Flesch, 2015) posits that the cause of crime is role-taking. The DSC encompasses five major processes: reflected appraisals of self as a rule violator, antisocial attitudes, anticipated disapproval of deviant acts from family and friends, criminal associations, and prior experience with crime and delinquency. Taking the processes together, the likelihood of crime and delinquency, including recidivism, increases when an individual believes that he is as a rule violator, holds antisocial attitudes, anticipates limited disapproval of deviance from family and friends, associates with deviant peers, and has repeatedly solved prior problematic situations using criminal or delinquent behaviours. In addition, DSC also postulates that more distal factors, such as role commitment and structural locations, affect crime and delinquency indirectly via role-taking.

Also, the theory of differential association is a variant of the Social Learning Theory and assumes that various motivations are learnt through association with significant others (Mowen et al., 2018); for instance, the impact that growing up under the supervision of the Eswatini community had on the behaviours of individuals living in disadvantaged communities. Therefore, it is likely that many offenders, even before imprisonment, may have grown up in environments unsupportive of mainstream values and norms. The statement is supported by McNeeley (2017), who states that it is unlikely that incarceration would lead to offenders' correction, as they are never socially integrated, and possibly imprisonment may have worsened the situation, hence the high rate of recidivism. This borrows from the Bronfenbrenner Ecological Theory (BET) that it is critical to study a child in the context of multiple environments, also referred to as ecological systems, and states it is necessary in order to understand the child's development, which further supports the SCT (Espelage, 2014).

In applying this theory, it can be said that offenders usually find themselves promptly trapped in various ecosystems, from the most intimate one, which is the home ecological system, moving outward to the larger school system, and the most spread-out system, which is society and culture. Each of these systems build the personality of an offender and influence each other in every aspect of the offender's life. The

BET theory helps to understand how individuals become recidivists from interactions with family members, peers and other people in the community.

CHAPTER THREE

REVIEW OF RELATED EMPIRICAL STUDIES AND HYPOTHESES

This chapter reviews the empirical findings regarding psychosocial pathways to recidivism risk.

A substantial amount of research is examined;

- (a) The relationship of personality, social support, forgiveness, spirituality, religiosity and mental health on recidivism risk;
- (b) The influence of social-demographic variables (gender, age, type of crime and duration of imprisonment) on predicting recidivism risk among offenders; and
- (c) The potential mediating roles of forgiveness, spirituality/religion and mental health on the association of personality and social support with recidivism risk of offenders.

The conceptual framework of this study

Figure 1: Conceptual Model of Psychosocial pathways to recidivism-risk among offenders in correctional centres in Eswatini: A Mediation Study

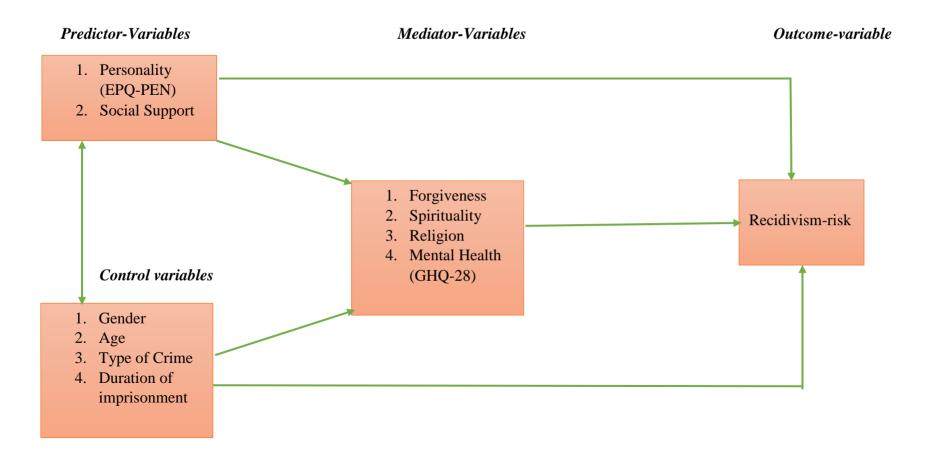


Figure 1: Study conceptual model

This model suggests that personality and social support would directly predict recidivism risk. It is expected that high social support would predict low recidivism risk. However, it is expected that high scores on PEN would predict high recidivism risk. In addition, it is anticipated that forgiveness, spirituality, religiosity, and mental health will mediate the influences of PEN and social support on recidivism risk. Socio-demographics which are also specified as control variables will directly predict recidivism risk.

3.1 Recidivism risk

Recidivism risk has become one of the most vital social problems that have gained significant attention from social and behavioural scientists. Likewise, relapse into criminal behaviour among released offenders is a significant concern in the United States; a recent study of 30 states found that 77% of 404,638 state prisoners released in 2005 were arrested within 5 years (Cohen, 2017). A study by Caudill (2010) also maintained about 85% of juveniles and young adults aged 24 years or younger, released from correctional facilities, are re-arrested within 5 years. This shows that developed countries are also facing the same challenge of recidivism. Moreover a study conducted in the United States of America (Yale University) by Tiako *et al.* (2019) reported a significant 68% increase of recidivism among offenders who used drugs such as dagga and cocaine, therefore the type of crime contributes to the increase of recidivism risk among offenders.

Musekwa (2019) reported that South Africa has the highest crime and recidivism rates, both as a country and provincially in the developed provinces such as the metro municipalities; Buffalo City (East London), City of Cape Town, Ekurhuleni Metropolitan Municipality (East Rand), City of eThekwini (Durban), City of Johannesburg, Mangaung Municipality (Bloemfontein), Nelson Mandela Metropolitan Municipality (Port Elizabeth), and City of Tshwane (Pretoria). Furthermore Lekalakala (2016) supports that recidivism is a major contributing factor to overcrowding in South African correctional centres; it is a problem that exists in all the correctional centres in the world. Recidivists of different types of crime are treated the same, such as a combination of minor and major offences. There is no international

standard on recidivism risk. Recidivism has been inconsistent in the past four years, hence Khwela (2015) reported that in South Africa, the recidivism rate is 50 to 70 percent of offenders who re-offend within a period of three years. This study is supported by Schoeman (2002), who reported that an estimate of the rate of recidivism in South Africa ranges between 55% and 95% yearly, and therefore, after 13 years the rate of recidivism and recidivism-risk has escalated in developing countries, which include Eswatini.

In addition, Murhula *et al.* (2019) revealed that the South African Department of Correctional Services (DCS) implemented new rehabilitation programmes to reduce the high rate of recidivism and recidivism risk. The rate has not shown a difference; 40% of the offenders in South Africa are at risk of being recidivists due to the lack of psychological factors, such as social support and forgiveness. Recidivism risk could, for instance, be because the offenders have not made good decisions when they came out of custody (Olofinbiyi *et al.*, 2019). This could be caused by lack of guidance before and after release from the correctional centre. An additional issue reported by Scanlan *et al.* (2020) is that communities do not re-accept offenders easily. The public seems to regard offenders as social outcasts and they are perceived as deserving bad things.

Adeleye (2020) further reveals that seven of the ten most unequal countries in the world are in Africa, with the sub-region of Southern Africa showing a striking concentration of countries which suffer from remarkably high income inequality levels, which leads to high rate of crime. These countries are Namibia, Comoros, South Africa, Angola, Botswana, Lesotho and Eswatini, which show a crime-inequality pattern. If income inequality drives crime, then it is envisaged that a positive relationship occurs such that countries with high inequality indices will have a high rate of crime, while lower levels of crime are generally related to higher levels of development, as well as to lower levels of income inequality. In other words, factors that drive crime rates equally drive income inequality.

Musa (2016) states that the risk of recidivism happens amongst all nations in the world, including Eswatini, with a negative impact on individuals, which includes the social and economic sphere of life. This current study indicates that the goals of Eswatini correctional services are those of safe custody and supervision of inmates, and reducing the rate of recidivism. The Criminal Justice of Eswatini in 2018

(SI) reported that for 12 years the rate of recidivism and recidivism-risk has been increasing gradually at the rate of 21% once the offenders are released from correctional centres. Unfortunately, little or nothing has been done in Eswatini about recidivism risk. However Biswalo (2011) observed that recidivists are often people who do not secure employment once they are out of the correctional centres in Eswatini.

Furthermore, Eswatini reported different rates of crime in correctional centres, which reveals the rate of crime that may increase the recidivism risk. These rates are founded on the different types of crime in Eswatini's total population, which is about 1,136 million. Crime increase in the past 3 years (2018-2020) has been 56.65%, with house breaking up by 40.62%, assult 12.50%, corruption and bribery 59.38%, and using or dealing drugs 40.62%. Just like any other developing country, Eswatini has a low rate of safety; safety for walking alone during the daylight is 87.50%, and safety walking alone during the night is 55.56%. It has a crime index of 33.71% and safety index of 66.29% (Aphane, 2020). The public is therefore more interested in keeping offenders locked up rather than in supporting the Correctional Services Department to pursue a programme of rehabilitation and reintegration, hence the high rate of recidivism. The above statistics of crime show the need for attention to look at how much risk the offenders are exposed to in the correctional centres in Eswatini.

3.2 Personality and recidivism risk behaviour among offenders

Eysenck was quite convinced that the (P-E-N) conceptual and descriptive categories are necessary and sufficient for a thorough understanding of individual differences in personality, more especially offenders (Eysenck, 2017).

Personality traits of an offender predict an individual's behaviour, so adult offenders with antisocial personality disorders (ASPD), with or without antecedent conduct disorders (CD), are more likely to be involved in criminal behaviour (Boduszek *et al.*, 2014). Moreover McKinley *et al.* (2018) maintain that antisocial personality disorder is a form of personality pathology involving rule and law breaking, irresponsibility, impulsivity, and aggressiveness that begins in childhood and persists into adulthood, which develops into criminal behaviour, heartlessness and emotional insensitivity which may lead to recidivism risk behaviour among offenders.

Mundia *et al.* (2017) support the Eysenck Model, showing ex-convicts with a high level of psychoticism likely re-offend because of high predispositions towards aggressiveness, antisocial behaviour, cold and egocentric behaviours. In this way, there may be first-time, second-time, or multiple-time offenders, and recidivism risk becomes an index of criminality. On the contrary Kong *et al.* (2015) reported that offenders with extraversion personality trait are sociable and outgoing, which means that they are more likely to be non-antisocial. Nonetheless, results from the Eysenck *et al.* (1985) psychoticism scale showed that offenders who score higher in psychoticism are more likely to show criminal behaviour. On the contrary, Cilliers *et al.* (2018) argue that offenders with neuroticism personality trait are anxious, depressed and react to aversive stimuli.

Personality of offenders is strengthened by four correlated first-order factors; *Interpersonal* offenders have superficial charm, an impressive sense of self-worth, are given to pathological lying and are manipulative, while *Affective* offenders lack of remorse or guilt, have shallow affect, lack of empathy and failure to accept responsibility for their own actions. Offenders with *Lifestyle* factors have a need for stimulation to avoid boredom, a parasitic lifestyle, lack of realistic long-term goals, impulsivity, irresponsibility, and *Antisocial* factors pertain to a sense of poor behavioural controls, early behaviour problems, juvenile delinquency, revocation of conditional release and criminal versatility, which is commonly related to recidivism-risk behaviour, according to Eisenbarth *et al.* (2018) and Krstic *et al.* (2017). Furthermore, Swogger *et al.* (2015) maintain that antisocial behaviour tendencies and manipulation lead to aggressive behaviour, which results in individuals being incarcerated, and if such behaviour is not controlled, the offenders become recidivists, which is not acceptable to the community. Green and Browne (2019) suggest that in order to reduce the high rate of recidivism, there is a need to establish risk factors that may be potential treatment targets from childhood, since personality is developed and shaped from childhood.

Seekings (2016) reports that offenders who do not participate in pro-social activities, for example, who remain unemployed and lack pro-social relationships, and those who participate in antisocial activities, such as gang affiliation and substance use, are at higher risk of recidivism. Neuroticism is

characterized by a tendency toward negative emotionality that is theorized to result from a hyperactive autonomic nervous system and increased emotional drives. DeLisi (2018) reported that neurotic offenders are typified as anxious, depressed, guilty, tense, moody, emotional, and having low self-esteem.

3.3 Social support and recidivism-risk among offenders

Social support is important for offenders to reduce recidivism-risk and the rate of recidivism. However, on the contrary, Kim *et al.* (2016) report that social support treatment does not reduce recidivism-risk, while Walters (2018) argues that specific types of social support treatment may warrant hopefulness, for example, visits from family members during incarceration may reduce recidivism risk. Thomas (2020) maintains that offenders need social support from the community to be able to be reinstated in the community and feel at home and welcomed; offenders who do not feel welcome in the community are more likely to re-offend, since offenders will feel safer at the correctional centre than in the community.

Moreover, Schnappauf and DiDonato (2017) state that opportunities for community members to engage in community support encourages offenders to secure positive social support and develop prosocial networks with the community. Johnson *et al.* (2016) maintain that social support from friends and family who do not hold true stigmatized labels can be irreplaceable; however, those convicted of sexual offending are socially isolated and separated from family following court authorisations. Locating individuals within a community which is willing and skilled to work with stigmatized offenders is a challenge, and skills to support people moving through a behavioural change process requires empathy, collaboration, a tolerance for the inevitable lapses likely to be experienced when making changes, and a belief that people change (Chioda, 2017). According to Cochran (2014), promoting qualities such as respect, care, compassion, and forgiveness would adopt and support the de-labelling process required to maintain desisting from crime.

Cochran (2014) agrees that offenders who maintain connections with their families outside of correctional centres have lower rates of re-offending, and that the timing and consistency with which

visitation occurs affect criminal behaviour. Specifically, offenders who are visited early and who experience a sustained pattern of visitation are less likely to be recidivists. According to Antwi (2015), lack of public engagement in conventional activities prevents ex-offenders from having meaningful interactions with pro-social others and building new identities. The weak ties to conventional society also implies that informal controls, which are critical in desisting criminality, also become weak (Walters, 2018); this produces anger, strain, low self-esteem, lack of self-control and a sense of social rejection. Thus, most ex-offenders tend to seek support from illegitimate sources by developing criminal capital, leading to recidivist behaviours. Families may not provide support for offenders in all circumstances. For example, Blonigen *et al.* (2020) maintain that in most cases the offenders are under stress, or the influence of alcohol or drugs which leads to such behaviour; families will then neglect the offenders and do not support them either financially or emotionally.

3.3 Forgiveness and recidivism risk

Duwe and King (2013) state that forgiveness in correctional centres can reduce recidivism-risk, but only if evidence-based practices are applied that focus on providing a behavioural intervention within a therapeutic community, addressing the criminogenic needs of participants and delivering a continuum of care from the institution to the community, given that forgiveness relies on individuals' willingness. Therefore, forgiveness lowers recidivism risk, which includes reduced re-incarceration; the programme may be especially advantageous from the perspective of benefit for both the offenders and victims.

Forgiveness of oneself enables one to responsibly manage the consequences of wrongdoing or re-offending. The practice of self-forgiveness may be essential to the preservation of one's physical, psychological, relational, and spiritual health (Griffin *et al.*, 2015). Forgiveness promotes improved mental health outcomes among both victims and perpetrators of wrongdoing. Evidence in support of this claim rests on two assumptions. First, emotion is the primary mechanism of the relationship between forgiveness and health of the offenders (Derdaele et al., 2017). Every act of forgiveness is embedded within a framework construed by the people involved and the nature of the specific offence that produces health outcomes unique to the situational context; in this study this is recidivism-risk (Schumann, 2018).

Therefore, one's own emotional states are the proximal cause of the forgiveness-health relationship, which occurs within the unique structure of one's relationship to others and, possibly, to a higher power.

Lubaale (2017) indicates that forgiveness does have behavioural consequences for offenders because reductions in revenge and avoidance motivations, and an increased ability to wish the offender well are features of forgiveness that can impact upon behavioural intention without obliging reconciliation. Mooney *et al.* (2016) support that forgiveness can be a one-sided process, whereas reconciliation is a mutual process of increasing acceptance of having committed the crime and offending the other person (victim), therefore the offender will be able to accept the wrongdoing and there will be less chance of recidivism-risk behaviour.

According Cerci and Colucci (2018), the forgiveness process results in decreased motivation to retaliate or maintain hostility from an offender despite their actions, and requires letting go of negative emotions toward the offender. Mela *et al.* (2017) posit the extent to which forgiveness also implies replacing the negative emotions with positive attitudes including compassion and kindness. In any event, forgiveness occurs with the victim's full recognition that he deserved better treatment; the weak can never forgive, as forgiveness is an attribute of the strong (Yao, 2019).

Griffin (2014) reported that if an offender perceives the stressor as sufficiently threatening, the offender would experience the stress response of self-condemnation, which is comprised primarily of negative emotions including guilt, shame, anger, regret and disappointment, and commit the same offence. Moreover Greer *et al.* (2014) confirm that even after statistically controlling for forgiveness and transgression-related variables such as religiosity and spirituality. This suggested that although offenders can be willing to forgive due to their religion and spirituality level it is more likely that they go against the law and be a risk to be recidivists, and offenders with social support are still predicted to have variance in revenge and generosity toward an offender after a misbehaviour.

3.4 Spirituality, Religiosity and recidivism risk among offenders

Offenders' spirituality is strongly associated with protection from many other negative offenders' outcomes, including internalizing problems (Riola-Parada *et al.*, 2016), and externalizing behaviour problems, which often lead to recidivism-risk. Therefore those with higher levels of religious commitment and involvement were less likely to engage in criminal behaviour and have less recidivism -risk (Murhula *et al.*, 2019).

The role of spirituality and religiosity groups can help offenders to desist from crime while reintegrating into the community. Moreover, a religious and spiritual environment can promote motivation to change, provide access to pro-social peers, offer moral guidance, provide a support network, and help bring meaning into peoples' lives (Bakken *et al.*, 2014). Furthermore Aday *et al.* (2014) suggested that religion and spirituality can be considered a formal social institution that has the ability to increase one's social capital and redirect offenders into a more straight life to lower the rate of recidivism.

On the other hand the role and meaning of spiritual and religious communities to individuals is an absorbing one to offenders in fighting recidivism-risk, especially given that two of the primary goods sought by all humans include those of community and spirituality (Boduszek *et al.*, 2014). Furthermore Kewley *et al.* (2015) posit that essence, person-centric, forgiveness, love, tolerance and compassion are some of the virtues most faith communities strive to achieve when it comes to forgiving offenders. Johnson *et al.* (2016) state that faith or engaging in religious activity reduces recidivism-risk and criminal or deviant behaviour. In addition, Desmarais *et al.* (2016) reported that religiosity has an inverse relationship with crime in the adolescent populations. Kiyala (2019) maintains that religiosity is an important area in terms of understanding the issues of early onset and development of crime; however, it does not advance understanding of the relationship between religion and adult offending. or rehabilitating populations in correctional centres (Stansfield *et al.*, 2017).

Aday *et al.* (2014) reported that street criminals who held strong beliefs about God, punishment, and the afterlife used their beliefs not only to justify their offending behaviour but also as a motivation to do God's work. In addition, Ray *et al.* (2019) reported that any association with crime among offenders is inadequate or purposeful misinterpretation of religious scriptures which in turn allows the individual to engage in criminal deviancy.

The significance of religiosity and spirituality is not a new proposition for supporting the desistance process. Bakken *et al.* (2014) stated that a religious community is one of the most powerful hooks for change (a catalyst for cognitive transformation required for long-term behavioural change) and particularly for convicted offenders. Therefore situations such as faith environments can be strong influences on criminal behaviour, and such situations can provide both the opportunity and access to potential victims (Mowen *et al.*, 2018).

In addition the community in correctional centres, such as chaplains, social workers, psychologists and correctional volunteers, are the first people within the correctional centres with whom offenders feel safe (Mowen *et al.*, 2018). Therefore the support of religious groups is not always for spiritual or personal change, it is also for engagement to feel safe, to mix with others outside of correctional centres, and to gain social support (Stansfield *et al.*, 2017).

Offenders' spirituality is significant to reduce the high rate of recidivism, although there is a dearth of empirical evidence directly examining the subject. Researchers (Cochran *et al.*, 2014) have considered that programmes such as inviting churches to preach, bible studies and religious fellowship with explicit religious content and spirituality may reduce recidivism of offenders.

Stansfield *et al.* (2017) argue that the religiosity and spirituality focus of programmes that include a spiritual component really empower individuals' dignity, promote humanity, and develop faith, therefore offenders who are not spiritually led are more likely to be recidivists because they lack the element of forgiveness.

3.5 Mental Health and recidivism among offender populations

Although the issue of mental illness among offender populations has received attention in the past few years, there are a number of mental health issues, such as somatic, anxiety, social dysfunction and severe depression which are the causes of recidivism-risk, moreover as they are related to mental illness among offenders (Bales *et al.*, 2017). Klepfisz *et al.* (2014) mentioned that there are increasing numbers of offenders suffering from mental illness in the criminal justice system, which leads to recidivism-risk and recidivism; therefore, it is important to determine whether these conditions are associated with risk of recidivism. Mental illness is found to be a prediction of recidivism-risk among offenders (Kingston & Olver, 2017). Therefore mental illness and recidivism-risk correlates with mental health issues such as personal distress of the offenders. However Minoudis and Kane (2017) maintain that individuals with mental disorders such as psychoses, somatic disorder, anxiety disorder, social dysfunctioning and major or severe depression are grossly overrepresented in the criminal justice system.

3.5.1 Somatic/insomnia disorder

Kong *et al.* (2015) posit that when offenders with somatic disorder are released, they are significantly more likely to receive suspensions or revocations without the commission of a new offence when compared with other offenders. Schimmenti *et al.* (2014) maintain that borderline personality disorder (BPD) is associated with interpersonal physical aggression since offenders are recidivists with the same offence of assault.

Uche and Princewill (2015) revealed a significant prevalence for severe depression and somatic features among offenders and they reported a correlation with recidivism risk. Moreover, Tsur *et al.* (2017) added that both before and during incarceration, a quarter of inmates had a history of somatic disorder, and two-thirds of them were off-treatment at the time of their arrest. Therefore, Dewa *et al.* (2015) state that offenders have many potential risk factors for insomnia including mental ill-health and substance misuse. Around a third of offenders experience general insomnia symptoms and between 5 and 15 percent experience clinically defined insomnia disorder (ID). This reflects the high rate of depression among offenders, and insomnia has a negative impact on the quality of life of offenders.

3.5.2 Anxiety

Anxiety in correctional centres is experienced by offenders in awaiting trial sections, remand sections, medium and maximum security prisons (Mhlongo *et al.*, 2018). The anxiety challenges faced by offenders are not similar to those suffered by community members in general, because offenders are always surrounded by fear, and correctional centres are mostly categorised as an uneasy environment. And, since security differs at various levels of prisons (maximum and medium security) it is more likely that the level of anxiety will also differ (Tsur *et al.*, 2017). Offenders are likely to encounter a high level of anxiety in maximum security jails and more psychotic disorders in medium security prisons, leading to recidivism-risk behaviour (Green & Browne, 2019).

Chabalala (2017) reports that there are many anxiety disorders among new inmates awaiting their trial court date, or sentencing, and remand, particularly with overcrowded correctional centres that are unhygienic and inherently dangerous. Offenders could be in denial of their awaited destiny or anxious about having been wrongfully arrested, hence less likely to forgive (Meyer et al., 2016). Öğülmüş et al. (2020) indicated that some offenders have disputes with families and community, resulting in little or no family or community support, and have disputes with their legal representatives; unfortunately, that increases the recidivism-risk and rate of recidivism. Sukeri et al. (2016) added that newly sentenced offenders present with anxiety as they contemplate lengthy jail sentences. They also typically have insomnia, tiredness, restlessness, and irritability, and often comfort themselves with the false belief that they will soon be out after an appeal or on parole. Nonetheless, they become mathematical experts in counting and doing permutations of their release from jail. An unusual cause of anxiety is the pre-release period, when offenders' anxiety is based on the fear of having to leave the comfort of prison, their lifestyle for the past 15 years or more (Steyn & Hall, 2015). Factors include the worry about being rejected by a society that they may have violated severely, or the loss of pivotal family members while incarcerated, as offenders are not allowed a pass-out to attend a funeral. They may also worry about not getting jobs because of a criminal record, fear of reprisal by surviving family members of victims, and the real possibility of being stigmatized by society (jail-bird syndrome) (Chabalala, 2017).

3.5.3 Social dysfunctioning

Steyn and Booyens (2017) reported different results about the social dysfunctioning of offenders who are recidivists, and stated that mostly sexual recidivists become a problem in the society, because incarcerated offenders have poorer mental health states compared to the general population. This is worrisome for the society because of a potentially high recidivism-risk and rate of recidivism among offenders. Furthermore, they reported that offenders are more likely to score high on social dysfunctioning, which is a problem among offenders and results in a high recidivism-risk. Moreover Bales *et al.* (2017) maintain that being an offender between the ages of 35-49 is associated with an increase in severity of mental disorders, which in turn increase the high level of recidivism risk.

A study by Duggleby *et al.* (2017) reveals that offenders released with mental health issues (social dysfunction) are more likely to be recidivists across the different types of mental health diagnoses. Thus, Duggleby *et al.* (2017) further elaborated that the reintegration of offenders with social dysfunction disorder may also prove difficult because of little or no optimal psychiatric treatment provided in some correctional centre settings. Prinsloo and Hesselink (2015) argue that in correctional centres in Southern African countries, there is a lack of on-site psychiatric units to assist with cases of mental health issues of offenders. This is a worrying aspect, thus there is an increase in the number of socially dysfunctional offenders incarcerated due to lack of initial assessments in correctional centres.

3.5.4 Severe Depression

Amigó *et al.* (2017) reported mental illnesses, such as depression with other diagnostic categories are deemed so debilitating and treatment-intensive that they were in fact ranked by the World Health Organization (WHO) in 2017, as contributing to the high recidivism-risk. *Nagdee et al.* (2019) found significant levels of mental ill-health and alcohol abuse permeating offenders, which increases the recidivism-risk in African countries, including Eswatini.

When an offender's emotional stability leads to abnormal behaviour, the individual is more likely to be incarcerated, not only because of the pathological criminal behaviour, but also because of addictive disorders (substance abuse), which are characterized by compulsive behaviour due to negative

consequences. Therefore, Yoder *et al.* (2017) argue that offenders with good decision-making skills, impulse control, emotional control, reward anticipation, information processing, maintenance of goal-directed behaviour, working memory, and others known as executive functions are less likely to have recidivism-risk behaviour. Conversely, those with weak executive functioning are at increased susceptibility for poor emotional and behavioural control that manifests in a variety of ways, including imprudent norm violations, aggression, delinquency, and criminal violence (Swogger *et al.*, 2015).

3.6 Gender, age, types of crime, and duration of imprisonment to recidivism risk of offenders

The current study also discusses socio-demographic factors, which play a role in an offender's life, such as gender, age, type of crime and duration of imprisonment. Consistent with the general criminological and sociological perspectives, it is assumed that males, persons of colour, African persons with less than a high school education, and younger individuals, will be at higher risk of recidivism (Svendsen & Preiholt, 2018). On the contrary, Scanlan *et al.* (2020) reported that all individuals are capable of being at a high risk of re-offending. Furthermore, Alcantud (2019) reported that the best predictor of recidivism risk and criminality is gender, more especially male, hence most of the correctional centres are full of males. Among all nations, communities, age groups and historical periods, the crime rate among males greatly exceeds that of females (Steyn & Booyens, 2017), Given that females often have high scores on emotional intelligence compared to males, they tend to commit fewer crimes of violence and murder (Willis, 2019).

A high rate of crime has been reported among the youth (Muthaphuli, 2017). After interviewing a number of violent offenders, Gould (2015) concluded that the foundations for violence and criminality are laid anywhere between 10 and 20 years before the effects are felt by the society. In other words, the way we, as a state and society, respond to children who witness and experience violence, neglect and abuse in 2015 will determine whether we will see the same levels of violence in 2025. This shows how high recidivism risk will be in the next 5 years in correctional centres because of how the society has neglected its responsibility of making sure that there is safety for itself and the youth of humanity. A study demonstrated that between the ages of 18 to 29 years, recidivism-risk in both the juvenile period

and the emerging adult period differs from a cultural context. Prior offences and education or employment emerged as significant predictors for youth and young adult recidivism, therefore different cultural samples play a role in how children are raised to lower the recidivism-risk (Cuervo *et al.*, 2020).

3.6 Type of crime and recidivism risk

A preliminary study by Matshaba (2017) reported that the primary crimes committed by the participants were robbery (26.27%), house breaking/burglary (18.43%), rape (14.19%), violence (9.53%), theft/in possession of stolen goods (9.32%) and murder (8.26%), and most offenders are recidivists in such crimes (both felony and misdemeanour). On the contrary, Lekalakala (2016) reported that sexual recidivists often specialise in their choice of victims or behaviours, and the likelihood of reoffending is dependent to some extent upon the offender's particular sexual criminal career. The author further maintains that most murder, robbery and sex offenders re-offend within two to three years of release from correctional centres or even less, thus the risk of sexual recidivism remains long after. On the contrary, Muthaphuli (2017) argues that assault crimes are reported at a high rate, which differs from country to country. Other crimes with similarly high rates have a violent nature, and most of the offenders re-offend.

Cervera *et al.* (2017) reported that generally, non-violent offences are more likely to lead to recidivism than violent offences, and those not related to sexual offences can lead to recidivism. However van der Put (2020) argues that offenders who are violent towards families or partners and the community are more likely to be recidivists, because there will be no support structure for the offender, hence the offender will be at risk of reoffending.

3.7 Frequency of offending and recidivism risk

According to Gumboh (2017), Southern African offenders who are first offenders have a greater chance of changing their ways than re-offending offenders. Therefore, specific deterrence is likely to be achieved when dealing with first offenders. Deterrence is a utilitarian theory of punishment which states that the ultimate good of society is to achieve happiness or pleasure and to avoid pain (Gumboh, 2017).

Curlewis (2016) reported that the social reintegration of long-term sentenced offenders could be regarded as the most challenging aspect of rehabilitation in effectively combating recidivism-risk. Mowen *et al.* (2018) stated that short-term serving offenders are vulnerable at the beginning of the social reintegration process if offenders will be in a correctional centre for less than one year, as rehabilitation is a process and the offender might not finish the process of rehabilitation. Therefore, it is said that when the strategy is to allow offenders to serve part of their sentences in the community, it is important to bridge the gap between the correctional centre and the community (Stansfield *et al.*, 2017) which leads to lower levels of recidivism risk.

3.8 Summary and the Identified Gaps in Literature

In general, the reviewed studies have shown that scoring high on certain of the dimensions of personality and lack of social support had a significant negative effect on recidivism risk in offenders. These studies also indicated that no matter the gender, age, type of crime, and duration of imprisonment of offenders, all individuals are at high risk of being recidivists regardless of their socio-demographics. In addition to that, studies have shown that forgiveness, spirituality, religiosity and mental health have the potential of influencing the extent to which an offender is at risk of recidivism.

Nevertheless, these reviewed studies did not clearly test the extent to which psychosocial, sociodemographic factors and forgiveness, spirituality, religiosity and mental health may affect recidivism risk in Eswatini correctional centres, using mediation analysis. To sum up, little or no attention has been given to offenders in Eswatini correctional centres. Against this background, the current study examines the predictive roles of personality traits and social support on recidivism risk among offenders in some selected correctional centres in Eswatini. In addition, it investigates the mediating roles of mental health, forgiveness, spirituality and religiosity on the associations of personality traits and social support with recidivism risk.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

This chapter consists of eight sections, namely: research design, participants, sample procedure, how the correctional centres were selected, description of procedure, recruitment process, instruments and psychometric properties, and statistical methods and analysis. The comprehensive explanation of each section is presented below.

4.1 Research design

A cross-sectional research design and quantitative research approach was used to investigate psychosocial pathways to recidivism risk (DV-dependent variable) among offenders in correctional centres. The psychosocial factors of the study are personality and social support as IVs (independent variables), and MVs (mediator variables) are forgiveness, spirituality, religiosity and mental health. The study carried out a correlational measurement of two or more factors to determine or estimate the extent to which the values for the factors are related or change in an identifiable pattern (Flesch, 2015). This was done to discover a relationships among variables and to allow the prediction of the MVs (forgiveness, spirituality, religiosity and mental health) and DV by the IVs (personality and social support), and the DV (recidivism risk) by the MV (forgiveness, spirituality, religiosity and mental health.)

4.2 Sampling

Eswatini has four administrative and geographical regions, namely Manzini, Hhohho, Shiselweni and Lubombo. There are eleven (11) correctional centres in total in the country. Each region has two correctional centres, except Manzini Region, which has five. A multi-stage sampling method was used to select the correctional centres and offenders who participated in the study. Since each of the regions has two correctional centres, one correctional centre was selected using the lottery sampling method per region, except for Manzini. In Manzini region, two correctional centres were randomly selected using a table of random numbers of "Yes" and "No". Any two with a "yes" were picked. Therefore, a total number of five correctional centres were selected for the study. In addition, following the multi-stage

sampling method, the offenders were randomly selected using a table of random numbers of "Yes" and "No." Those who picked "Yes" were included in the study while those who picked "No' were excluded from the study. A table of regional affiliations of correctional centres is indicated in table 4.1 below.

Table 4.1: The administrative and geographical regions of Eswatini

Hhohho region	Shiselweni region	Lubombo region	Manzini region
1.Piggs Peak correctional	3.Nhlangano correctional	5.Mbalekane Farming	7.Matsapha correctional centre
centre	Centre	correctional centre	
2.Sidvwashini correctional	4.Mawelawela Female	6. Big Bend correctional	8.Manzini remand centre
centre	correctional centre	centre	
			9.Criminal Mental Asylum centre
			10.Malkerns Young prison centre
			11.Mankayane correctional centre

Note: The table presents how the correctional centres are distributed administratively and geographically in the regions of the Kingdom of Eswatini. Hhohho, Shiselweni and Lubombo region have two correctional centres as, from an administrative perspective, they are regarded as the smaller regions of the country. However, Manzini region is the centre of the country geographically and administratively, hence it has five correctional centres. Most of the administration of the correctional centres takes place in the Manzini region, and the biggest correctional centre is in Manzini region, which is the Matsapha correctional centre.

Established from the information attained from the Brief (2020), Eswatini had 4430 offenders in April 2019. There were 2550 convicted offenders out of the obtained statistic population who took part in the study. The following unlock numbers (morning-count, midday-count and afternoon-count of offenders per day) of the five correctional centres who took part in the study and were verified by the Eswatini Correctional Research Board are as follows:- Sidvwashini Correctional Centre 350, Mawelawela Female Correctional Centre 270, Mbalekane Farming Correctional Centre 657, Matsapha Correctional Centre 1009, and Mankayane Correctional Centre 70. This amounted to population of 2356. The number of offenders were not distributed equally across the geographic regions of the country, so

the Yamane (1967) method of proportionate sampling technique was used in the study to select the participants from each correctional centre. The precise sample size of the current study was 244 offenders, which was a feasible sample, supported by the Yamane (1967) formula. (See formula below);

The theoretical aspect of Yamane's formula is as follows:

N =the sample size

N =the population size

e = the acceptable sampling size error

*95% confidence level and = 0.5 are assumed

N

n=____ =

$$1 + N * (e)^2$$

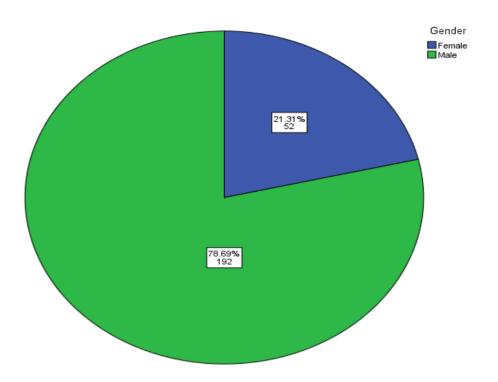
*95 confidence level and =0.5 are assumed

This formula was used to arrive at the sample size. However the sample size was not only determined by Yamane's formula but also the SEM. For statistical reasons Structural Equation Model (SEM) and multiple regression analysis was used in the study, therefore, a minimum of 200 participants is required to run these analyses (Wolf *et al.*, 2013).

4.3 Participants

The participants of the study consisted of 244 offenders (192 male and 52 females) from five correctional centres in Eswatini. More detailed demographics of the current study participants are explained below.

Figure 4.1.1 shows the distribution of participants according to gender



The sample consisted of 52 females (21.31%) and 192 males (78.69%). This distribution indicates that there are more male correctional centres in Eswatini than female correctional centres. There is only one female correctional centre in Eswatini out of eleven correctional centres in the country; hence, more males participated in the current study.

Figure 4.1.2 Distribution of participants according to age

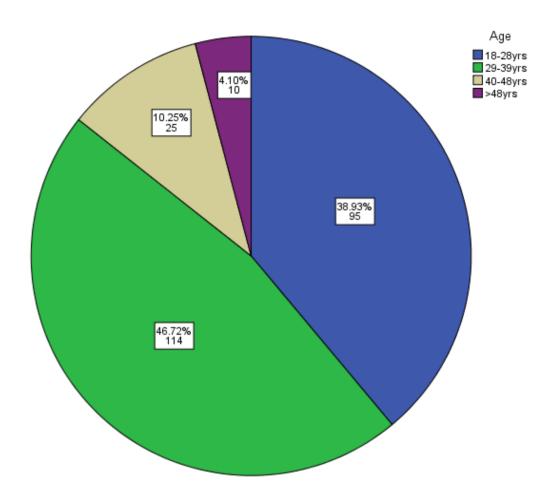
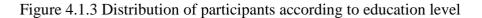


Figure 4.1.2 shows the age distribution of the participants. 114 (46.72%) were between the ages of 29–39 years, 95 (38.93%) were between the ages of 18–28 years (which are young adults), 25 (10.25%) were between the ages of 40–48 years and lastly 10 (4.10%) were aged 48 years old and above.



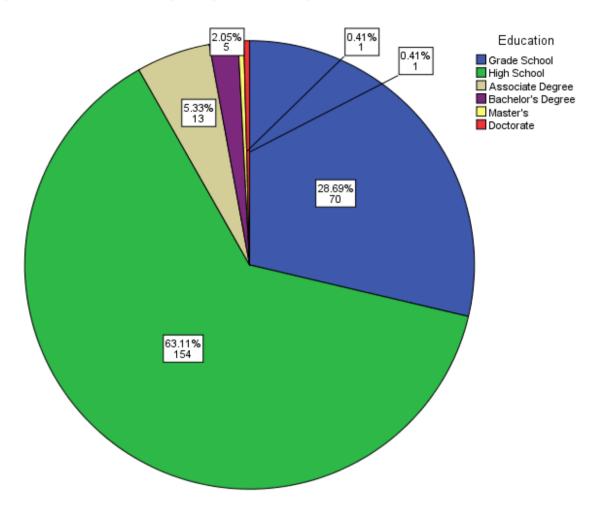


Figure 4.1.3 reports that 154 (63.11%) participants had attended high school, which is between form 1-5, 70 (28.69%) had primary school level education, which is grade 1-7, 13 (5.33%) have an associate degree, 5 (2.05%) have a bachelor's degree, 1 (0.41%) had a Master's degree and 1 (0.41%) had a doctorate.

Figure 4.1.4 Distribution of participants according to marital status

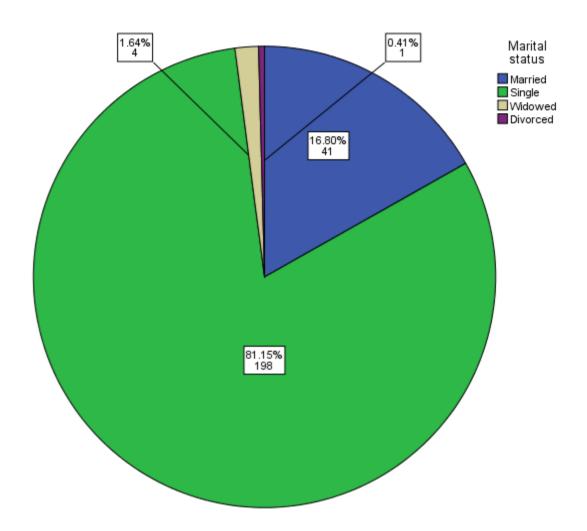
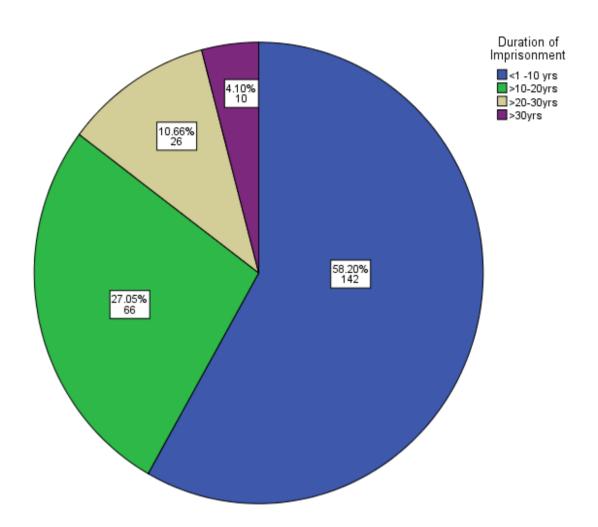


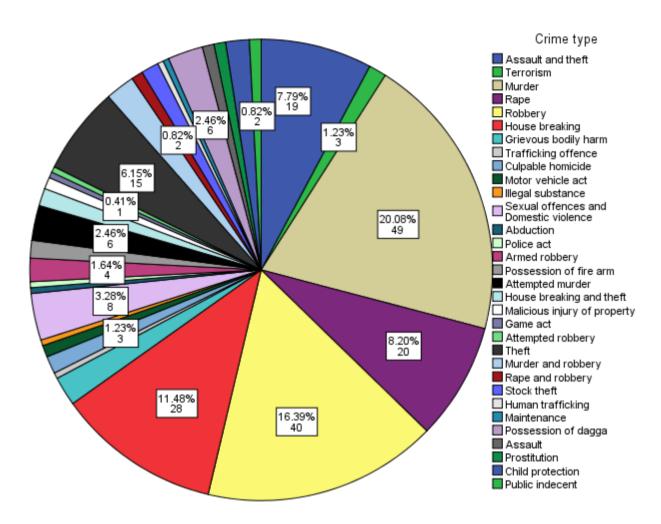
Figure 4.1.4 reports that 198 (81.15%) were single, 41 (16.80%) were married, four (1.64%) were widowed and one (0.41%) was divorced.

Figure 4.1.5 Distribution of participants according to duration of imprisonment



According to figure 4.1.5, 142 (58.20%) are under incarceration between 1–10 years, 66 (27.05%) are imprisoned for between 10–20 years, 26 (10.66%) are incarcerated for between 20–30 years and 10 (4.10%) are incarcerated for 30 years and above.

Figure 4.1.6 Distribution of participants according to type of crime



According to figure 4.1.6, the most frequent crime committed was murder, with 49 (20.08%), followed by robbery, 40(18.39%), burglary, 28 (11.48%), rape, 20 (8.2%), assault, 19 (7.79%) and theft, 15 (6.15%). Other crimes committed were individually less than 5%.

4.4 Procedure for data collection

Permission to conduct the study was requested from the Health Research Ethics Committee (HREC) of the Faculty of Health Sciences of the North-West University (NWU). The ethics number is **NWU-00046-19-A1**. Permission to collect data was requested from His Majesty's Correctional Services Eswatini Research and Ethical Board, and the Centre's Officer in Charge (O/C)/ Director as the gatekeeper to issue the questionnaire to offenders. Furthermore, the Officer in Charge gave access to the participants verbally, based on the permission letter from His Majesty's Correctional Services Eswatini Research and Ethical Board.

There was a recruitment stage, where an advertisement was posted in all the correctional centres. Participants who were interested were invited to part take in the study through a box for volunteering, which was provided where the participants who were interested could drop their names, so that on the day for data collection they were called randomly.

An independent person (research assistant), who was trained to perform this duty and did not have any stake in the study, provided potential participants who were willing to take part in the study with the informed consent form, so there was no conflict of interest. The research assistant was affiliated to the correctional centre and was knowledgeable about correctional centre work, familiar with the correctional centre and correctional centre rules. The role of the research assistant was to act as an independent person and to obtain informed consent from participants.

During a meeting, potential participants were provided with the informed consent form and given an opportunity to ask questions. Potential participants were also informed that they would be provided with a date for a meeting with the researcher in order to ask questions. Potential participants were given at least one week to peruse the informed consent form and to decide whether they wished to participate in the study.

In a correctional centre, security is the first priority, therefore, guards, or warders and wardresses were requested to assist with security. They signed a confidentiality agreement form, but confidentiality was guaranteed, since these officers did not have access or a link to the questionnaires, and the questionnaires did not have identification of the offenders. The participants were informed that there would be partial confidentiality, since there was always a warden or guard present during the data collection processes, although the study used a self-administered questionnaire rather than interviews. Participants were taught how to complete the questionnaire.

The research assistant collected data, preferably during the morning hours, when offenders had not yet gone out to perform their daily duties and were not tired. It was anticipated that each offender would take between 30 and 45 minutes to complete the questionnaire. During data collection, if participants happen to need psychosocial intervention, an independent clinical psychologist volunteering in the study was on standby to intervene during data collection in all the correctional centres. The clinical

psychologist has current experience in working with offenders in private practice and is a Ph.D. student at the North-West University, Mafikeng Campus.

Based on the research ethics, the data will be stored for five years in the data safe of the Department of Psychology of the University. The Research Committee of the Department of Psychology will monitor the data, and the research team (promoter of the study, researcher and statistician) will have access to the electronic data version. A password was created for safety of the data, and hard copies of the data were stored in a locker with keys in the Psychology Department. In addition, the research assistant checked the questionnaires manually after the participants had completed filling them in. Furthermore, if a questionnaire was not completed fully, those missed items were considered as missed items in the study. The student and the study are also monitored every three months since the study is a high risk by the HREC, checking if the researcher is still abiding by the rules and regulations of the HREC. The data will be destroyed after five years (in 2025). The hard copies will be destroyed by the Archive Department of the University, and the Research Committee of the Department will delete the soft copies.

4.6 Instruments and psychometric properties

The questionnaires used were divided into different sections as follows:

Section A: Biographic information;

Section B: Eysenck Personality Questionnaire (EPQ-PEN) - (Eysenck et al., 1985).

Section C: Berlin Social Support Scales (BSSS) - (Schwarzer & Schulz, 2000);

Section D: The Forgiveness Scale - (Rye & Pargament, 2002);

Section E: The Forgiveness Likelihood Scale - (Rye and Pargament, 2002);

Section F: Spirituality Well-Being Scale - Ellison (1983) (revised by Darvyri et al., 2014);

Section G: 10-Item Hoge intrinsic religiosity scale - (Hoge, 1972);

Section H: The scaled General Health Questionnaire (GHQ-28) - (Goldberg & Hillier, 1979); and

 $Section\ I:\ Brief\ Assessment\ for\ Recidivism\ Risk\ (BARR-2002R)\ -\ Roberts,\ Doren,\ and\ Thornton$

(2002).

4.6.1 Demographic questionnaire

The demographic questionnaire asked questions relating to age, gender, type of crime and duration of imprisonment.

4.6.2 Brief Assessment for Recidivism Risk (BARR-2002R) - Roberts et al. (2002)

The BARR-2002R is an actuarial risk scale for assessing general and violent (including sexual) recidivism risk among offenders. The BARR-2002R comprises a measure of general criminality. The BARR-2002R predicts non-sexual violence, any violence and general recidivism risk. The BARR-2002R correlates with other risk assessment tools designed to predict recidivism risk. The scale is used on convicted offenders who receive an equivalent sanction that qualifies as a sentencing occasion in Item 2 of Static-2002 and is found to be valid and reliable only for adult offenders from different cultures (Roberts *et al.*, 2002). The scale demonstrated test-retest reliability among offenders in the United States of America, with psychometric properties showing acceptable inter-rater reliability (r = .94) and temporal stability (r = .80) (Dickson, 2014).

For the scoring of the scale, an item score may be positive zero, or negative. Each item has a description, which has an Offender Management System (OMS); if one of them applies to the offender, the value of the OMS is the score of the offender. If no description applies, then the score value is zero. The OMS calculates an offender's total score by adding the 15 individual item scores together.

Furthermore, the Cronbach attained among offenders in South Africa is 0.80, which is an indication that internal consistency is relatively high (cross-cultural) and that offenders in South Africa (Tadi & Louw, 2013) mostly share the same culture as Swati offenders. Therefore, the scale can be used for participants in the current study. The current study reported a Cronbach's alpha of .70.

4.6.3 Eysenck Personality Questionnaire (EPQ) - (Eysenck et al., 1985; Tiwari et al., 2009)

The Revised Eysenck Personality Questionnaire (EPQR-S) containing 48 items was used in this study and the response format was 'Yes' or 'No'. The questionnaire has been used among adults and for prison populations to measure offenders' personality traits (Botha *et al.*, 2018). The EPQR-S contains three major subscales (extraversion, neuroticism, psychoticism) and a validity scale (lie). The scale reports reliabilities for males and females respectively of 0.84 and 0.80 for neuroticism, 0.88 and 0.84 for extraversion, 0.62 and 0.61 for psychoticism, and 0.77 and 0.73 for the lie scale (Tiwari *et al.*, 2009). The EPQR-S has been used and standardised within the African context, for example Idemudia (1997) and Malindisa and Winterdyk (2015) This scale was used and standardised for participants in the study since it has been used in an African context before. The Cronbach alpha coefficient obtained in the current study was fair: 0.61.

4.6.4 Berlin Social Support Scales (BSSS) - (Schwarzer & Schulz, 2000)

The scale measures cognitive and behavioural aspects of social support in relation to quantity, type, and function of social support in general. The BSSS was developed and validated with an adult population across different clinical and healthy adult populations. The scale has 17 items and 6 subscales. Response format ranges from 'Strongly Disagree' (1) to 'Strongly Agree' (4).

The reliability or internal consistency coefficients for subscales are: Emotional Support (8 items) = .83; Instrumental Support (11 items), = .83; Need Support (4 items) = .63; Support Seeking (5 items), = .81; Protective Buffering (6 items), = .82; and Provided Social Support (11 items) = .76 (Schwarzer & Schulz, 2000). The BSSS has been used and standardised within the African context, for example, Malindisa and Winterdyk (2015). Additionally, the Cronbach's alpha of the above subscales were .85, .82, .70, .80 and .84 respectively. A Cronbach's alpha of .90 was reported for the current study.

4.6.5 The Forgiveness Scale - (Rye & Pargament, 2002)

The Forgiveness Scale is a 15-item Likert-type scale designed to measure the willingness of the offender to reconcile with the victim. Factor analyses revealed that the Forgiveness Scale contains two subscales as follows: Absence of Negative, and Presence of Positive (Rye & Pargament, 2002),

significantly correlated in the expected direction with measures of forgiveness, religiousness, anger, hope, religious well-being, existential wellbeing and social desirability (Lama, 2017). Response format ranges from 'Disagree' (1) to 'Strongly Agree' (5).

The Forgiveness Scale has been used in different cultures among offenders, including African cultures (Mooney *et al.*, 2016) and it showed satisfactory cross-cultural validity (Subkoviak *et al.*, 1995). Cronbach's alphas for the Absence of Negative and Presence of Positive subscales of the Forgiveness Scale were .86 and .85 respectively (Rye & Pargament, 2002). The current study had Cronbach's alpha of .70.

4.6.6 The Forgiveness Likelihood Scale - Rye and Pargament (2002)

The Forgiveness Likelihood Scale is a 10-item Likert-type scale designed to measure tendency to forgive across situations among offenders. This scale assesses forgiveness as a dispositional tendency, focusing on the various traits that would dispose an offender to be forgiving or unforgiving over time and across different situations. Moreover, the scale consists of a single factor. A study by Strelan *et al.* (2016) revealed a reliability of 0.85 and validity of 0.87 for offenders, thus the scale will be standardised for participants in this study. The Forgiveness Likelihood Scale items were created to measure affective, cognitive, and behavioural responses to wrongdoing. Questions were evaluated based upon whether they measured important indicators of forgiveness as suggested by the research literature. Questions were also designed to assess both positive and negative responses to wrongdoing. Additionally, questions specifically measured responses to wrongdoing in a romantic or close relationship of the offenders. Response format ranged from 'Not at all likely' (1) to 'Extremely Likely' (5).

Forgiveness Likelihood Scale. Ten scenarios were developed involving hypothetical wrongdoing (see Appendix F). Scenarios were designed to assess a variety of types of wrongdoing (for example, infidelity, slander, theft) to which offenders would likely be able to relate and provide a meaningful judgment. The scenarios are also relevant to other populations (Rye & Pargament, 2002). The Cronbach's alpha for the Forgiveness Likelihood Scale was .85. In addition, the Forgiveness Likelihood Scale was

significantly correlated with religiousness and religious well-being in correctional centres for African participants (Mooney *et al.*, 2016). The current study Cronbach's alpha was .72.

4.6.7 Spirituality Well-being Scale

The Spirituality Well-being Scale by Ellison (1983, revised by Darvyri *et al.*, 2014) consists of 23 items constructed on a Likert-type format, from 'Strongly Disagree' (1) to 'Strongly Agree' (6). Darvyri *et al.* (2014) reported reliability of the Spiritual Well-being Scale is .94. Coefficients of the three subscales (Self-Discovery, Relationships and Eco-Awareness) ranged from .81 to .94. A study by Bales *et al.* (2017) revealed that reliability according to Cronbach's alpha was rated consistently above .90 among offenders across cultures with little dismissal of the items. The scale was standardised for participants in this study.

Scores indicate how important or to what extent the phenomenon of spirituality is to, or manifested by, the offender. The current study reported the Cronbach's alpha of the three subscales as Self-Discovery .58, Relationships .78 and Eco-Awareness .85.

4.6.8 Ten (10) Item Hoge intrinsic religiosity scale - (Hoge, 1972)

The scale consists of 10 items with a Likert-type scale format with responses from 'Strongly Disagree' (1) to 'Strongly Agree' (5). Sample items include the following: one should seek God's guidance when making every important decision; and, religious beliefs are what really lie behind life. The scale has been shown to have adequate psychometric properties (Hoge, 1972). The Cronbach's alpha coefficient was 0.89; re-computing the alpha after removing individual items on the scale resulted in alphas ranging from 0.87 to 0.89. Validity with other measures of religiosity are from 0.71 to 0.86 (Hoge, 1972). Moreover, the scale is cross-culturally standardised with the African context reliability of .68. The current study reported a Cronbach's alpha of .62.

4.6.9 The scaled General Health Questionnaire (GHQ-28) - (Goldberg & Hillier, 1979)

The GHQ-28 is divided into four subscales, assessing the severity of a mental problem, with higher scores indicating worse conditions; the response format is 'Yes' or'No'. Subscales are somatic symptoms (items 1-7); anxiety or insomnia (items 8-14); social dysfunction (items 15-21); and severe

depression (items 22–28) (Goldberg & Hillier, 1979). According to Zuckerman and Glicksohn (2016), the GHQ-28 remains one of the most robust screening tools available to assess psychological well-being and detect possible psychiatric illnesses of offenders across cultures. The scale has adequate test-retest reliability (Robinson & Price, 1982), and good internal consistency (Failde & Ramos, 2000). Test-retest reliability has been reported to be high (0.78 to 0.9) (Robinson & Price, 1982), and reliability has been shown to have Cronbach's alpha of 0.9-0.95 (Failde & Ramos, 2000) and high internal consistency. The current study reported somatic symptoms. The Cronbach's alpha for the full score as reported in the current study is .80. High scores on the scale reflect negative mental health and the presence of psychological distress.

4.7 Statistical methods and analysis

Data were captured and analysed using the Statistical Package for the Social Sciences (SPSS 26). The predictor variables are personality factors and social support; the mediator variables include forgiveness, spirituality, religiosity and mental health, while the outcome variable is recidivism risk. Structural Equation Model (SEM) was used in the study, therefore a minimum of 200 participants is required to run these analyses (Wolf *et al.*, 2013).

Descriptive statistics were used to analyse demographic variables. Pearson Product Moment Correlation was used to determine the extent and direction of relationships among the study variables.

All hypotheses were evaluated using structural equation modelling (SEM). The advantage of SEM over other statistics, such as multiple regressions, is that it reduces error variance found in multiple regressions. Apart from this, it enables researchers to specify and estimate the fitness of the model using mediator (intervening) variables to predict the relationships between the independent and dependent variables (Hoyle, 2011). Model estimation was done using maximum likelihood method (Bollen, 1989).

In SEM model, the chi-square statistics (χ^2) is the test, which requires a non-significant p-value (> .05). Given that the chi-square test is sensitive to sample size, the Standardized Root Mean Square Residual (SRMR), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation

(RMSEA), which are measures of relative fit, are also used to evaluate model fitness. For model fitness, Kline (2010) recommended a cut-off of .90 or greater for the CFI, and .06 or less for the RMSEA and SRMR. Preliminary analyses showed that data distribution met the assumptions for conducting SEM. Skewness and kurtosis values were between -1 and 1, showing that data distribution on variables were moderately normal (Blanca *et al.*, 2013). The method of replacement with the mean was used in filling up missing values, given that missing scores were no higher than 15% (Hair *et al.*, 2010). Finally, there was no outlier cases in data distribution.

CHAPTER FIVE

RESULTS

5.1 Introduction

This chapter reports the results on the six hypotheses generated in the study. It gives a detailed analyses of the statistical tools (i.e. Correlation and Structural Equation Modelling, SEM) used in analysing the study variables. Pearson Product Moment Correlation statistics were used to find the extent of the relationship among the study independent, control, mediating variables and dependent variable. Hypotheses 1 to 6 were analysed with Structural Equation Modelling statistics. This became necessary in order to know the mediation effects of forgiveness, spirituality, religiosity, and mental health on the connections of personality and social support and recidivism risk.

5.2 Correlation / relationship test of the study variables

In order to know the extent and direction of relationships among the study variables, Pearson Product Moment Correlation was used to analyse the data. Correlation was conducted in order to notify the SEM analysis on the relationships among the variables and to know which variables to be included in the model. The results are presented in Tables 5.1a, b and c.

5.3 Correlations Analyses

Table 5.1a: Summary of correlations among recidivism risk, independent and control variables

N = 244	1	2	3	4^{\dagger}	5	6	7	8	9	10	11	12	13
Mean			31.61	11.7	10.57	3.48	7.17	6.86	12.43	11.79	12.16	15.40	51.82
SD			8.27	11.5	7.58	1.94	2.15	2.46	3.65	3.67	2.78	4.24	11.45
Gender (1)													
Marital status (2)	.03												
Age (3)	05	.32**											
Imprisonment duration (4)	09	.10	.26**										
Recidivism risk (5)	.26**	.27**	.39**	07									
Psychoticism (6)	.11	04	02	07	05								
Extraversion (7)	14*	.07	.07	.04	.05	004							
Neuroticism (8)	.04	.04	11	.08	15*	.09	.02						
Emotional support (9)	05	03	07	09	.07	12	.04	14*					
Instrumental support (10)	02	.01	02	.01	.14*	17**	.12	11	.76**				
Need support (11)	06	01	.02	.06	.001	22**	.19	09	.47**	.51**			
Support seeking (12)	05	.01	06	.04	02	19**	.06	09	.53**	.50**	.55**		
Support (full score) (13)	06	.01	05	.03	.04	20**	.13*	10	.84**	.82**	.71**	.80**	

^{**.} Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed); † (in years) Gender (0 = Male; 1 = Female); Marital status (0 = Unmarried; 1 = Married)

The results of correlation analyses among recidivism risk, independent and control variables are presented in table 5.1a. The result showed that recidivism risk was associated with gender [r (242) = .26, p < .001], marital status [r (242) = .27, p < .001] and age [r (242) = .26, p < .001]. Specifically, being a female, married and older were associated with lower risk of recidivism. Of all the personality types, recidivism risk was found to correlate only with neuroticism [r (242) = -.15, p = .016]. In particular, high neuroticism correlates with high risk of recidivism. Similarly, recidivism was associated with only the instrumental dimension of social support [r (242) = .14, p = .036]. Specifically, a high perception of instrumental support correlates with lower recidivism risk. This implies that there is a need for social support for offenders in order not be at risk of being recidivists.

Table 5.1b: Summary of correlations between recidivism risk and mediating variables

N = 244	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mean	10.57	4.06	4.08	2.68	3.52	14.28	16.37	29.06	45.29	17.79	28.79	60.86	107.48	35.26
SD	7.56	1.71	1.99	1.24	2.24	5.03	5.16	6.93	7.94	4.39	5.96	1.62	19.24	6.22
Recidivism risk (1)														
Somatic symptoms (2)	11													
Anxiety/insomnia (3)	13*	.54**												
Social dysfunction (4)	02	.09	.16*											
Severe depression (5)	14*	.31**	.52**	27**										
GHQ-28 (full score) (6)	16*	.69**	.80**	.43**	.78**									
Forgiveness PP (7)	02	04	07	09	20**	15*								
Forgiveness AN (8)	03	08	20**	08	19**	20**	13*							
Forgiveness (full score) (9)	04	09	22**	13**	30**	27**	.52**	.76**						
Self-discovery (10)	004	04	03	25**	05	12	.11	.003	.07					
Relationships (11)	.07	05	08	21**	13*	14*	.15*	.02	.11	.46**				
Eco awareness (12)	.07	06	02	21**	17**	16*	.14*	01	.09	.59**	.72**			
Spirituality (full score) (13)	.06	06	04	24**	14*	16*	.15*	.01	.11	.73**	.83**	.96**		
Religiosity (14)	004	07	06	17**	18**	16*	.12*	.04	.18**	.33**	.53**	.56**	.57**	

^{**.} Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed); PP = Presence of positive; AN = Absence of negative, GHQ = General Health Questionnaire

The results of correlation analyses between recidivism risk and the mediating variables are presented in table 5.1b. Outcomes showed that recidivism risk was associated with only two dimensions of mental health. Anxiety/insomnia [r (242) = -.13, p = .047], severe depression [r (242) = -.14, p = .035] and mental health (full score) [r (242) = -.16, p = .014] were negatively related to recidivism risk. Specifically, high scores on anxiety/insomnia, severe depression and general mental health correlate with higher risk of recidivism. However, recidivism was not significantly associated with religiosity [r (242) = -.004, p < .96], forgiveness [r (242) = -.04, p < .59], spirituality [r (242) = .06, p < .36] and their dimensions.

Table 5.1c: Summary of correlations between independent and mediating variables

N = 244	1	2	3	4	5	6	7	8
Psychoticism (1)								
Extraversion (2)	004							
Neuroticism (3)	.09	.02						
Emotional support (4)	12	.04	14*					
Instrumental support (5)	17**	.12	11	.76**				
Need support (6)	22**	.19**	09	.47**	.51**			
Support seeking (7)	19**	.06	09	.53**	.50**	.55**		
Support (full score) (8)	20**	.13*	10	.84**	.82**	.71**	.80**	
Somatic symptoms (9)	.04	.03	.30**	09	08	07	09	08
Anxiety insomnia (10)	.14*	06	.50**	17**	14*	12	12	15*
Social dysfunction (11)	01	13*	.09	14*	22**	05	09	16*
Severe depression (12)	.13**	18**	.38**	21**	22**	18*	15*	22**
Mental health (full score) (13)	.10	10	.49**	25**	26**	16*	17*	24**
Forgiveness PP (14)	05	.05	05	.08	.13*	.12*	.10	.12
Forgiveness AN (15)	05	.08	09	.08	.05	03	.02	.06
Forgiveness (full score) (16)	07	.11	11	.13*	.14*	06	.09	.14*
Self-discovery (17)	13*	.15	01	.27**	.30*	.12	.26**	.30**
Relationships (18)	20**	.13	04	.35**	.38**	.30**	.42**	.45**
Eco awareness (19)	14*	.08	08	.43**	.43**	.33**	.42**	.48**
Spirituality (full score) (20)	16*	.12	06	.43**	.44**	.31**	.45**	.50**
Religiosity (21)	16*	.18**	06	.30**	.30**	.30**	.37**	.38**

^{**}. Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed); Gender (0 = female; 1 = male)

The results of correlation analyses between independent and the mediating variables are presented in table 5.1c. Of all the dimensions of mental health, results showed that psychoticism was significantly associated with only anxiety/insomnia [r (242) = .14, p = .035] and severe depression [r (242) = .13, p = .047]. High scores on psychoticism correlates with higher scores on anxiety/insomnia and severe depression. In addition, psychoticism was found to be negatively associated with religiosity [r (242) = -.16, p = .016], spirituality [r (242) = -.16, p = .012] and its dimensions {self-discovery:[r (242) = -.13, p = .047]; relationships [r (242) = -.20, p = .002]; eco-awareness [r (242) = -.14, p = .03]}. However, there was no significant relationship between psychoticism and forgiveness [r (242) = -.07, p = .25].

Further, of all the mediating variables, extraversion was only significantly and negatively associated with social dysfunction [r (242) = -.13, p = .049], severe depression [r (242) = -.18, p = .005] and positively related to religiosity [r (242) = .18, p = .005]. Neuroticism only formed positive

associations with mental health [r (242) = .49, p < .001] and its subscales, except social dysfunction {somatic symptoms: [r (242) = .30, p < .001]; anxiety/insomnia [r (242) = .50, p < .001]; severe depression [r (242) = .38, p < .001]; social dysfunction [r (242) = .09, p = .18]}.

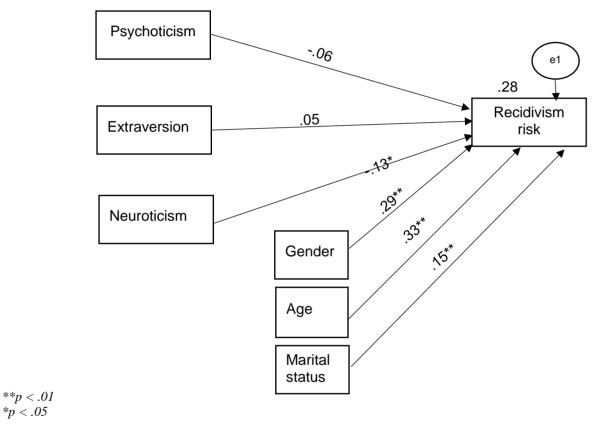
Generally, social support and its subscales were associated with almost all the mediating variables. Social support (full score) was negatively associated with anxiety/insomnia [r (242) = -.15, p = .02], social dysfunction [r (242) = -.16, p = .01], severe depression [r (242) = -.22, p < .001] and mental health (full score) [r (242) = -.24, p < .001]. Also, social support (full score) was positively associated with forgiveness (full score) [r (242) = .14, p = .03], self-discovery [r (242) = .30, p < .001], relationships [r (242) = .45, p < .001], eco-awareness [r (242) = .48, p < .001], spirituality (full score) [r (242) = .50, p < .001] and religiosity [r (242) = .38, p < .001].

5.3 Hypotheses one (1) to six (6) testing

Hypotheses 1 to 6 were analysed using structural equation modelling (SEM).

5.3.1 Hypothesis One: Personality factors will directly predict recidivism risk of offenders

The hypothesis was tested using Structural Equation Modelling (SEM). Personality factors consisted of psychoticism, extraversion and neuroticism. Gender, age and marital status were controlled given that they formed significant relationships with recidivism risk as shown in table 5.2. The path diagram with standardized estimates is presented in figure 5.1.



Note: This model was extracted from the AMOS graphics for clarity

Figure 5.1: Direct effect of personality factors on recidivism risk controlling for demographic variables

Results of path analyses with p-values are displayed in table 5.2. The model fit was satisfactory, $\chi^2(2) = 1.24$, p = .54; CFI = 1.00; RMSEA = .00 [90% CI = (.00, .11)], SRMR = .01. Outcomes show that only neuroticism ($\beta = -.13$, p = .02) significantly predicted recidivism risk, while extraversion ($\beta = .05$, p = .33) and psychoticism ($\beta = -.06$, p = .27) did not. Specifically, an increase in neuroticism predicted a high risk of recidivism. The control variables, gender ($\beta = .29$, p < .001), age ($\beta = .33$, p < .001) and psychoticism.

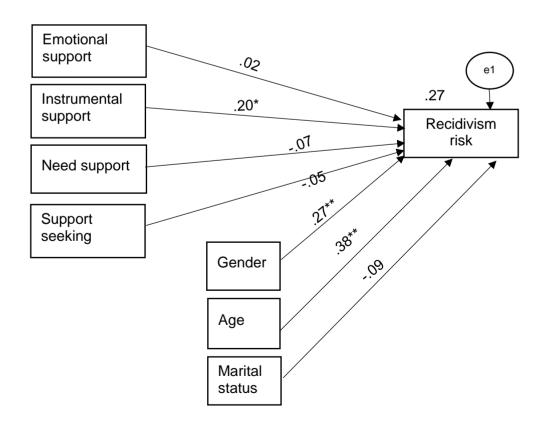
.001) and marital status (β = .15, p = .009) were significant on recidivism risk. Specifically, being a female, married and older predicted a low risk of recidivism. The model explained 28% variance in recidivism risk.

Table 5.2: Summary of direct effects of personality factors on recidivism risk

		Estimate	S.E.	C.R.	P
Recidivism risk <	Psychoticism	06	.22	-1.11	.27
Recidivism risk <	Extraversion	.05	.20	.97	.33
Recidivism risk <	Neuroticism	13	.17	-2.36	.02
Recidivism risk <	Sex	.29	1.03	5.19	<.001
Recidivism risk <	Age	.33	.05	5.70	<.001
Recidivism risk <	Marital status	.15	1.17	2.63	.009

5.3.2 Hypothesis two: Social support will directly predict recidivism risk of offenders.

The hypothesis was tested using structural equation modelling (SEM). Social support dimensions include emotional support, instrumental support, need support and support seeking. Gender, age and marital status were also controlled in the model. The path diagram with standardized estimates is presented in figure 5.2.



^{**}*p* < .01

*p < .05

Note: This model was extracted from the AMOS graphics for clarity

Figure 5.2: Direct effect of social support dimensions on recidivism risk controlling for demographic variables

Results of path analyses with p-values are displayed in table 5.3. The model fit was also satisfactory, $\chi^2(2) = .59$, p = .74; CFI = 1.00; RMSEA = .00 [90% CI = (.00, .08)], SRMR = .009. Results show that only instrumental support ($\beta = .20$, p = .03) significantly predicted recidivism risk while emotional support ($\beta = .02$, p = .85), need support ($\beta = .07$, p = .33) and support seeking ($\beta = -.05$, p = .47) did not. Specifically, an increase in instrumental support predicted a lower risk of recidivism. Gender ($\beta = .27$, p < .001) and age ($\beta = .38$, p < .001) were significant on recidivism risk while marital status was not ($\beta = -.09$, p = .11). The model explained 27% variance in recidivism risk.

Table 5.3: Summary of direct effects of social support on recidivism risk

		Estimate	S.E.	C.R.	P
Recidivism risk <	Emotional support	.02	.183	.189	.85
Recidivism risk <	Instrumental support	.20	.182	2.223	.03
Recidivism risk <	Need support	07	.189	971	.33
Recidivism risk <	Support seeking	05	.126	726	.47
Recidivism risk <	Sex	.28	1.016	5.009	<.001
Recidivism risk <	Age	.38	.053	6.531	<.001
Recidivism risk <	Marital status	09	.965	-1.595	.11

5.3.3 Hypothesis three: Mental health will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

The hypothesis was tested using SEM. Neuroticism and instrumental support were specified as the independent variables, mental health as mediating variable and recidivism risk as dependent variable. Other dimensions of personality and social support were not included in the mediation models because they were not significant or recidivism risk as shown in the results for hypotheses one and two. The path diagram of the model with standardized estimates is presented in figure 5.3.

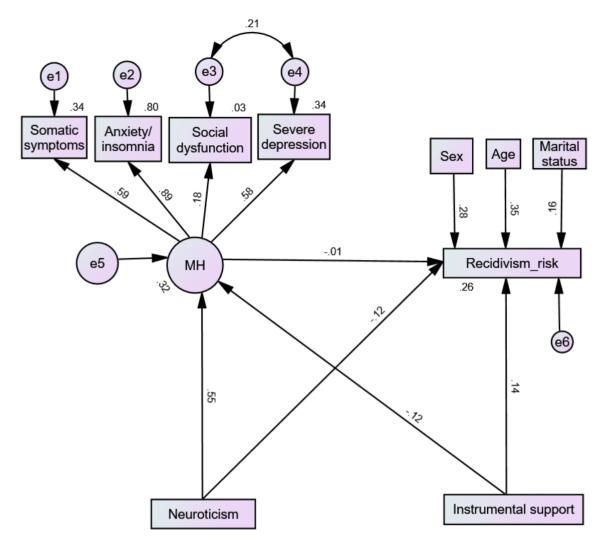


Figure 5.3: Mental health mediating the relationships of neuroticism and instrumental support with recidivism risk

The mediation model met the acceptable criteria for model fit, $\chi^2(11) = 20.21$, p = .04; CFI = .97; RMSEA = .059 [90% CI = (.01, .098)], SRMR = .01. The model indicated a 26% variance in recidivism risk. The direct influence of neuroticism ($\beta = -.10$, p = .23), instrumental support ($\beta = .11$, p = .08) and mental health ($\beta = -.08$, p = .35) were not significant for recidivism risk. However, the direct influence of neuroticism ($\beta = .55$, p < .001) and instrumental support ($\beta = -.12$, p = .05) were significant on mental health. Specifically, an increase in neuroticism predicted an increase in poor mental health while an increase in instrumental support predicted a decrease in poor mental health.

In a SEM framework, evidence for mediation requires that both indirect and total effects be significant (Preacher & Hayes, 2004). Outcomes of mediation analysis indicate that the standardized total effect of neuroticism on recidivism risk was significant (β = -.14, p = .026). However, the standardized total effect of instrumental support on recidivism risk was not significant (β = .12, p = .067). The

standardized indirect effects of neuroticism and instrumental support were tested using bootstrapping.

Table 5.4 displays the 90% and 95% bias-corrected confidence intervals for indirect effects.

The indirect effects of neuroticism and instrumental support on recidivism risk both passed through zero, indicating non-significance. Given that only the total effect of neuroticism was significant while its indirect effect was not, it can be concluded that mental health did not mediate the relationship between neuroticism and recidivism risk. In addition, since both total and indirect effects of instrumental support were not significant, it can be concluded that mental health did not mediate the relationship between instrumental support and recidivism risk.

Table 5.4: Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through mental health

mental nearth						_
Mediated paths	90	% CI		95% CI		
	Lower	Upper	Estimate	Lower	Upper	_
	bounds	bounds		bounds	bounds	
Neuroticism > Mental health > Recidivism	23	.19	01	27	.23	_
Instrumental support > Mental health > Recidivism	03	.05	.001	04	.06	

5.3.4 Hypothesis four: Forgiveness will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk

The hypothesis was tested using SEM. Neuroticism and instrumental support were specified as the independent variables, forgiveness as the mediating variable and recidivism risk as the dependent variable. The path diagram with standardized estimates is presented in figure 5.4.

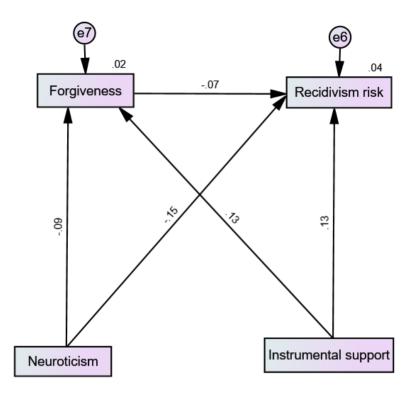


Figure 5.4: Forgiveness mediating the relationships of neuroticism and instrumental support with recidivism risk

The model fit statistics were satisfactory, $\chi^2(1) = 2.74$, p = .10; CFI = .87; RMSEA = .085 [90% CI = (.00, .21)], SRMR = .03. The direct influence of neuroticism ($\beta = -.15$, p = .02), and instrumental support ($\beta = .13$, p = .04) on recidivism were significant while that of forgiveness ($\beta = -.07$, p = .29) was not. While the direct influence of instrumental support on forgiveness was significant ($\beta = .13$, p = .048), the direct influence of neuroticism was not ($\beta = -.09$, p = .15). Specifically, an increase in instrumental support led to an increase in level of forgiveness.

Outcomes of mediation analysis indicate that standardized total effect of neuroticism on recidivism risk was significant (β = -.14, p = .026). However, the standardized total effect of instrumental support on recidivism risk was not significant (β = .12, p = .067). Table 5.5 displays the 90% and 95% bias-corrected confidence intervals for indirect effects.

The indirect effects of neuroticism and instrumental support on recidivism risk both passed through zero, indicating non-significance. Given that only the total effect of neuroticism was significant while its indirect effect was not, it can be concluded that forgiveness did not mediate the relationship between neuroticism and recidivism risk. In addition, since both total and indirect effects of instrumental

support were not significant, it can be concluded that forgiveness did not mediate the relationship between instrumental support and recidivism risk.

Table 5.5: Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through forgiveness

Mediated paths	90		95% CI			
	Lower	Upper	Estimate	Lower	Upper	
	bounds	bounds		bounds	bounds	
Neuroticism > Forgiveness > Recidivism	004	07	.02	01	.11	
Instrumental support > Forgiveness > Recidivism	.09	.004	02	08	.01	

5.3.5 Hypothesis five: Spirituality will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

The hypothesis was tested using SEM. Neuroticism and instrumental support were specified as the independent variables, spirituality as the mediating variable and recidivism risk as the dependent variable. The path diagram with standardized estimates is presented in figure 5.5.

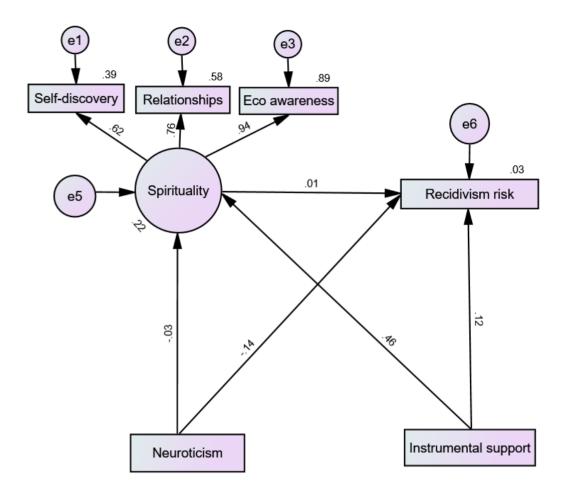


Figure 5.5: Spiritualty mediating the relationships of neuroticism and instrumental support with recidivism risk

The fit statistics met the acceptable criteria for model fit, χ^2 (7) = 5.32, p = .62; CFI = 1.00; RMSEA = .00 [90% CI = (.00, .066)], SRMR = .03. The direct influence of neuroticism (β = -.14, p = .03) on recidivism risk was significant while the influence of instrumental support (β = .12, p = .11) and spirituality (β = .01, p = .94) were not. The influence of instrumental support (β = .46, p < .001) on spirituality was significant. Specifically, an increase in instrumental support predicted an increase in level of spirituality.

Results of mediation analysis suggest that standardized total effect of neuroticism on recidivism risk was significant (β = -.14, p = .026). However, the standardized total effect of instrumental support on recidivism risk was not significant (β = .12, p = .067). Table 5.6 displays the 90% and 95% biascorrected confidence intervals for indirect effects.

The indirect effects of neuroticism and instrumental support on recidivism risk both passed through zero, indicating non-significance. Given that only the total effect of neuroticism was significant while its indirect effect was not, it can be concluded that spirituality did not mediate the relationship between neuroticism and recidivism risk. In addition, since both total and indirect effects of instrumental support were not significant, it can be concluded that spirituality did not mediate the relationship between instrumental support and recidivism risk.

Table 5.6: Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through spirituality

Mediated paths	90		95% CI			
	Lower	Upper	Estimate	Lower	Upper bounds	
	bounds	bounds		bounds		
Neuroticism > Spirituality > Recidivism	04	.02	001	06	.03	
Instrumental support > Spirituality > Recidivism	13	.15	.01	17	.18	

5.3.6 Hypothesis six: Religiosity will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

The hypothesis was tested using SEM. Neuroticism and instrumental support were specified as the independent variables, religiosity as the mediating variable and recidivism risk as the dependent variable. The path diagram with standardized estimates is presented in figure 5.6.

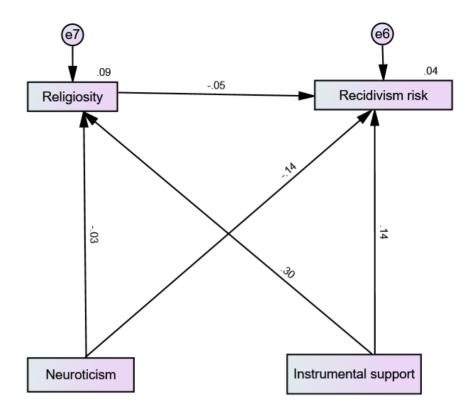


Figure 5.6: Religiosity mediating the relationships of neuroticism and instrumental support with recidivism risk

The fit statistics met the acceptable criteria for model fit, $\chi^2(1) = 2.74$, p = .10; CFI = .94; RMSEA = .08 [90% CI = (.00, .21)], SRMR = .03. The direct influence of neuroticism ($\beta = -.14$, p = .02) and instrumental support ($\beta = -.136$, p = .04) on recidivism risk were significant, while the influence of religiosity ($\beta = -.05$, p = .42) was not.

Results of mediation analysis suggest that standardized total effect of neuroticism on recidivism risk was significant (β = -.14, p = .026). However, the standardized total effect of instrumental support on recidivism risk was not significant (β = .12, p = .067). Table 5.7 displays the 90% and 95% biascorrected confidence intervals for indirect effects.

The indirect effects of neuroticism and instrumental support on recidivism risk both passed through zero, indicating non-significance. Given that only the total effect of neuroticism was significant while its indirect effect was not, it can be concluded that religiosity did not mediate the relationship between neuroticism and recidivism risk. In addition, since both total and indirect effects of instrumental

support were not significant, it can be concluded that religiosity did not mediate the relationship between instrumental support and recidivism risk.

Table 5.7: Bias-corrected unstandardized 90% and 95% confidence intervals for indirect effects through religiosity

Mediated paths	90		95% CI		
	Lower	Upper	Estimate	Lower	Upper
	bounds	bounds		bounds	bounds
Neuroticism > Religiosity > Recidivism	01	.06	.02	02	.08
Instrumental support > Religiosity > Recidivism	11	.03	.05	13	.05

CHAPTER SIX

DISCUSSIONS. CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This study examined the relationships among personality, social support, gender, age, type of crime, duration of imprisonment, forgiveness, spirituality, religiosity, and mental health, and recidivism-risk. It also investigated whether personality and social support will directly predict recidivism-risk among offenders. Furthermore it investigated whether forgiveness, spirituality, religiosity and mental health will mediate the associations of personality and social support with recidivism-risk of offenders. This chapter focuses on the discussion of the results, conclusion and recommendations.

Hypothesis One: Personality factors will directly predict recidivism risk of offenders.

The results revealed that neuroticism significantly predicted recidivism risk while psychoticism and extraversion did not. This suggests that offenders who are neurotic have low emotional stability, negative emotionality, anxiety and depression. This result was supported by Cilliers *et al.* (2018), who reported that the neuroticism personality trait among offenders leads to high risk of recidivism or criminal behaviour among offenders, while extraversion and psychoticism did not. However, Eysenck's Model (Eysenck *et al.*, 1985) stated that ex-convicts with a high level of psychoticism may be re-incarcerated because such offenders score high on aggressiveness and antisocial behaviour. Therefore, offenders with neuroticism personality are more likely to be vulnerable to recidivism-risk. This implies that offenders with high neuroticism trait in Eswatini are more likely to be at recidivism risk. Hence, it is plausible to assume that personal disposition could be one of the determinants of that kind of behaviour. The personality traits one would first think of as being related to criminal recidivism are those that were already proven as being related to criminal behavior in general. Personality dispositions generate delinquent behaviour. These are durable and stable internal dispositions that shape moral behaviour and represent deep personality-related roots of individual differences in moral behaviour.

In addition, the current study is supported by Frankl's (1984) theory which confirmed that the direction of the neurotic individual toward the task of becoming fully aware of mission in life and toward sharpening instincts may fully appreciate the importance of living and will help strengthen the self and thereby diminish the influence of anxiety (neuroticism). In addition Frankl's model suggests that the individual's awareness that to search for meaning in human existence in general, and in one's own existence in particular, helps bring about the emergence of the self from the narrow borders within which it was confined. This implies that strengthening of the self gives a feeling of confidence and enables the individual to neutralize the negative effects of anxiety (neuroticism), and hence will be at lower risk of recidivism. The set of values that the individual builds up satisfies the quality which makes life worth living. This striving for meaning, if fulfilled, creates stability.

The control variables, of gender, age and marital status, were significant for recidivism risk. Specifically, being a female, married and older predicted a low risk of recidivism. The results were supported by Matshaba (2017), who reported that gender, age and marital status influence the recidivismrisk behaviour of offenders. For instance, males and youth from the age of 25 to 30 are more likely to be at risk of recidivism behaviour, more especially if not married. Steyn and Booyens (2017) maintain that a reasonable proportion of female offenders serve sentences for property and economic crimes, in particular theft and shoplifting, compared to males serving sentences for capital crimes, for instance murder and rape, which are at a higher risk for recidivism. Additionally Eysenck et al.'s (1985) theory agrees that criminal behaviour can be explained as a symptom of personality, whereby social factors such as gender, age and marital status contribute to criminal behaviour of offenders which leads to recidivism-risk. This theory is currently supported by Osher and Thompson (2020), who reported that neuroticism functions by reinforcing behaviour until certain action tendencies become characteristic; this is influenced by natural drive which makes subjects more persistent in offending behaviour (Eisenbarth et al., 2018). Therefore, high levels of neuroticism predict antisocial behaviour by virtue of said drive properties, which can increase criminal action tendencies in the subject; in this case offenders are more likely to be at risk of recidivism.

Hypothesis two: Social support will directly predict the recidivism risk of offenders.

Social support dimensions include; emotional support, instrumental support, need support and support seeking. The results revealed that only instrumental support significantly predicted recidivism risk. This means that offenders need a support system that will meet their daily needs; for instance, Eswatini is known for a high rate of poverty, and in correctional centres offenders have a daily meal that they do not have to worry about when they are inside. Therefore, that makes offenders to recidivate because there is instrumental support from the correctional centre that meets their daily needs. Furthermore, more support from the family or community is needed in order to feel welcome and supported when reintegrated. Lower level of social support from close relatives while incarcerated leads to recidivism risk because the offenders feel neglected by the people who are needed during and after incarceration (Thomas, 2020). However, on the contrary, Kim et al. (2016) report that social support treatment does not reduce recidivism-risk, as offenders become recidivists regardless of the social support they get from family and community. Instated, recidivism becomes a habit to offenders because of peer pressure from the people surrounding offenders. However, Walters (2018) argues that specific types of social support treatment, such as visits from family members during incarceration, may warrant hopefulness, which reduces recidivism risk. For instance, offenders might not be able to cope with the sentence given by the court and may need family support to avoid recidivism risk. Therefore the support given by religious groups is not always for spiritual or personal change; it is also for engagement to feel safe, to mix with others outside of correctional centres, and to gain social support (Stansfield et al., 2017).

Furthermore, Schwarzer and Schulz (2000) maintain that cognitive and behavioural aspects of social support are necessary during stressful circumstances, and it is important that offenders get support from family and community to reduce recidivism risk and a return to crime. This implies that offenders must be visited during visiting hours or days in the correctional centre to feel a sense of belonging. If offenders are not visited, they feel no sense of belonging and hence become recidivists due to support only from the correctional centre.

According to the Leading Differential Association Theorist, Sutherland (1939), cited in Moore and Bergner (2016), individuals are exposed to various role models throughout their lives who are a

social support system for those incarcerated, and they transmit particular attitudes and values that could be involved in criminal behaviours. Thus, such role models are the cause of recidivism-risk among offenders. For instance, those who are in gang groups in correctional centres are more likely to groom first-time offenders to belong to gangs and end up being recidivists. This theory simply means that for offenders not to be at risk of recidivism there must be social support from the family and community other than fellow offenders.

Hypothesis three: Mental health will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

The results indicated that direct influence of neuroticism, instrumental support and mental health were not significant on recidivism risk. Although this study reported mental health was not significant, other research had found significant results (Kingston & Olver, 2017). However, the direct influence of neuroticism and instrumental support were significant on mental health. Prinsloo and Hesselink (2015) reported that offenders in correctional centres in Southern African countries needs more instrumental social support in order to have good mental health.

In addition, the present results imply that it is essential for family members to support offenders to prevent psychological issues such as feeling unloved, which can cause anxiety among offenders. For instance, anxiety experienced by offenders from awaiting trial sections, remand sections, medium and maximum security prisons is not the same, which may lead to mental illness (Mhlongo *et al.*, 2018). Another research conducted supports that the anxiety challenges faced by offenders are not similar to those found by community members in general, because offenders are always surrounded by fear, and correctional centres are mostly categorised as an uneasy environment. The profile of offenders differs at various levels of security prisons (Tsur *et al.*, 2017) which result in other offenders not being able to cope with the environment. Therefore, the community needs to play a positive role in the rehabilitation of offenders to decrease the level of recidivism risk. Eswatini has one national psychiatric centre that is servicing the whole country and correctional centres, which leads to high recidivism risk. Moreover, it was concluded that an increase in neuroticism predicted an increase in poor mental health, while an increase in instrumental support predicted a decrease in poor mental health.

Hypothesis four: Forgiveness will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

However, the indirect effects of neuroticism and instrumental support on recidivism risk both passed through zero, indicating non-significance. The results indicate that for an offender not to be at risk of being a recidivist, he must be able to forgive and have social support from the community and family. Moreover the results showed that there was direct influence of neuroticism and instrumental support on recidivism-risk, while on the other hand, Lubaale (2017) reported forgiveness as not directly influencing recidivism risk. On the contrary, forgiveness promotes improved mental health outcomes among both victims and perpetrators of wrongdoing, hence it is important for correctional centres to conduct victim offender mediation (VOM) (Wormith *et al.*, 2020). This intervention prevents offenders being at risk of recidivism, because if there is no forgiveness between offender and victim, the chances of the offender being re-incarcerated are high (Derdaele *et al.*, 2017).

Furthermore, a study stated that the people involved, and the nature of the specific offence produce health outcomes unique to the situational context (Schumann, 2018); every act of forgiveness should be embedded within an individual's understanding. Mooney *et al.* (2016) maintain that forgiveness can be a one-sided process, whereas reconciliation is a mutual process of increasing acceptance of having committed the crime and offending the other person (victim); therefore, the offender will be able to accept the wrongdoing and there will be less chance of recidivism risk behaviour. On the contrary, Kewley *et al.* (2015) hypothesize that essence, person-centric, forgiveness, love, tolerance and compassion are some of the virtues most faith communities strive to achieve when it comes to forgiving offenders. Consequently, many communities have failed to forgive recidivists, instead forgiving those who are first-time offenders of petty crime such as shoplifting, hence the high rate of recidivism in developing countries. Therefore, the study concluded that an increase in instrumental support predicted an increase in level of forgiveness.

Hypothesis five: Spirituality is distinguished from all other things humanism, values, morals, and mental health by its connection to that which is sacred. Spirituality will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

The results revealed that there is direct influence of neuroticism on recidivism risk, while the influence of instrumental support and spirituality were not. Riola-Parada *et al.* (2016) reported that offenders' spirituality is strongly associated with protection from many other negative outcomes, which include internalizing problems and not being able to open up about how they feel or sharing in their daily lives, and externalizing behaviour problems. Internalizing problems often leads to recidivism risk because the environment in the correctional centre, whether negative or positive, also influences the personalities (neuroticism) of offenders. Therefore, those who joins religious groups while incarcerated are less likely to engage in criminal behaviour and have less risk of recidivism because of the commitment they make (Murhula *et al.*, 2019).

In addition, the results of this study show that the influence of instrumental support on spirituality was significant. Bakken *et al.* (2014) agree on the role of spiritual and religious groups in helping offenders to desist from crime, while when reintegrating into the community, a religious and spiritual environment can promote motivation to change, provide access to pro-social peers, offer moral guidance, and provide social support that is needed for the offenders to change behaviour.

Furthermore, Aday *et al.* (2014) maintain that religion and spirituality can be considered a formal social institution that has the ability to increase one's social capital and redirect offenders into a more straight life to lower recidivism-risk and rate of recidivism. Therefore, the results of the study show that it is important that offenders get spiritual support from the community, such as churches and religious people. They also indicate that spirituality and religiosity have the potential to keep offenders well balanced psychologically and lessen the recidivism risk behaviour. On the contrary, Stansfield *et al.* (2017) argue that religiosity and spirituality programmes include a spiritual component, which helps to empower individuals' dignity, promote humanity, and develop faith, therefore offenders who are not spiritually led are more likely to re-offend because they lack the element of forgiveness.

The study further reported that an increase in instrumental support predicted an increase in the level of spirituality. Thus, the correctional centres community, such as chaplains, social workers, psychologists and correctional volunteers, are the first people within the correctional centres with whom offenders feel safe and able to share their spiritual beliefs, and how to not recidivate (Mowen *et al.*, 2018). In this study, this means that instrumental support is significant to offenders in order to increase the spiritual level of the offenders.

Hypothesis six: Religiosity will significantly mediate the relationship of neuroticism and instrumental support with recidivism risk.

The direct influence of neuroticism and instrumental support on recidivism risk were significant. Religiosity, neuroticism and instrumental support are essential for all individuals, and additionally play a role in the rate of recidivism among offenders. The results of the study are supported by Stansfield *et al.* (2017), who posit that religiosity helps offenders address their criminogenic needs and it is an important responsivity factor that is overlooked in criminological theory and practice, which helps offender to control their neurotic behaviour and also have support from fellow believers. This implies that religiosity is an important theoretical and practical variable in current efforts to develop successful recidivism pathways in correctional centres. Moreover, Duncan *et al.* (2018) reported during incarceration, an overall significantly positive impact of religiosity, neuroticism and instrumental support involvement on recidivism risk, during the first year after release from a correctional centre, and over a 13-year follow-up period, among women. Religiosity is reported by Bhutta *et al.* (2019) to be significant in mediating among neuroticism and instrumental support and it played a role in reducing the rate of recidivism in correctional centres.

de Vries Robbé *et al.* (2015) suggested that a willingness to condemn past bad behaviour, realise that neuroticism, instrumental support and spiritual growth are on-going processes, replacing prison values with more meaningful and worthwhile values, finding hope and purpose for one's life reduces recidivism. This implies that there is an importance of giving back to society, which contributes to the reintegration process for offenders through religion.

In conclusion, Cochran *et al.* (2014) maintained that programmes such as inviting churches to preach, bible studies and religious fellowship with explicit religious content and spirituality may reduce recidivism risk among offenders.

6.2 Conclusion

The current study shows that neuroticism predicted recidivism risk while extraversion and psychoticism did not. Specifically, an increase in neuroticism predicted a high risk of recidivism. In addition, only instrumental support significantly predicted recidivism risk while emotional support need support and support seeking did not. Specifically, an increase in instrumental support predicted a lower risk of recidivism. This implies that it is essential for offenders to get social support from family and community members to make sure that when the offenders are reintegrated they will not recidivate. Furthermore, the current study shows that an increase in neuroticism predicted an increase in poor mental health, while an increase in instrumental support predicted a decrease in poor mental health. It is also shown that mental health did not mediate the relationship between neuroticism and recidivism risk. An increase in instrumental support led to an increase in the level of forgiveness, and instrumental support predicted an increase in level of spirituality. Offenders are social and spiritually connected to their families only if there will be support, for instance being visited while incarcerated. Lastly, religiosity did not mediate the relationship between neuroticism instrumental support and recidivism risk.

6.3 Recommendations

Based on the results of this study, the following recommendations are proposed.

The correctional centres are encouraged to develop good character in pursuit of rehabilitation of offenders by assessments of the factors that contribute to recidivism risk behaviour. This could be done through orientation of all the first-time offenders to assess the possibilities of re-offending, being able to prevent it early, so that the offenders are not exposed to the recidivism risk behaviour. In the rehabilitation programmes, religion, faith-based programmes, and faith-motivated volunteers are pervasive and may well play an important role in helping offenders to move closer in the pursuit of a

moral institution. In addition, other studies needs to explore further psychological theories, which can be used for future studies to close the gap and add knowledge in the Eswatini literature.

Eswatini has had little or no research carried out on recidivism risk, therefore it is recommended that future studies conduct focus-group discussions and in-depth interviews with known recidivists within the correctional centres to discover factors peculiar to this region in terms of recidivism, since this study was solely an investigation into psychosocial pathways to recidivism risk. In addition, a psychosocial profile of the inmates needs to be explored (qualitative approach) when the study is conducted. For example, provide incident rates (number of inmates compared to total sample) of those at risk of recidivism, and those with somatic symptoms, anxiety/insomnia, social dysfunction and severe depression. Assess the pattern of recidivism, pattern of psychopathology, diagnostic ability, cut-off points and their implications for recidivism risk. These will provide more insight into their level of functionality, rehabilitation needs and ability to adapt after release.

Mental health workers (social workers, psychologist and chaplains) and other stakeholders, for example the government, need to innovate programmes which will lower the recidivism risk level of offenders, because the more offenders who recidivate, the more the country's economy will be affected, since offenders are taken care of by the state. Eswatini correctional centres do need programmes that will develop the personality of offenders in order to prevent high recidivism risk among offenders. There is the need to enhance interventions with regard to social support. Such interventions could assist in building problem-solving and communication skills while practising self-reflection among offenders.

Future studies could explore the likelihood of recidivism among a sample of offenders who represent an equal number of recidivists and non-recidivists. It is possible that participation in the jail-based programmes could have affected personality, social support, forgiveness, spirituality, religiosity and mental health for some offenders but not others, resulting in diffused recidivism risk. Creating awareness in terms of recidivism risk will assist the community and the state to understand the phenomenon. Awareness will be created through educating the community on how to provide social support to offenders. Intervention programmes would establish relations between victims and offenders, to create prevention measures (reconciliation) for both populations. This would be enhanced during the

reconciliation stage before offenders are released. Lastly, the study recommends that development of scholarly effective intervention programmes with regard to decreasing the rate of recidivism by recommending how these interventions would assist offenders.

6.4 Implications of the study

The findings of the study have practical, theoretical and methodological implications.

6.4.1 Practical implications

Practically, this study showed that neuroticism, instrumental support and forgiveness have a relationship with recidivism risk among offenders. This implies that in the correctional centres the psychologist, social workers and chaplains have to play a role by conducting sessions which will help the offenders to learn how to forgive themselves and the victims, regardless of whether the offenders feel that they are right or wrong (incarceration by default). In addition, these sessions should be conducted before the offenders are reintegrated to the community. Recidivism risk implies that offenders should be given an opportunity to practise their beliefs, and this could lower the recidivism risk among offenders. Lastly, the outcome showing that increase in neuroticism predicted an increase in poor mental health and increase in instrumental support predicted a decrease in poor mental health, suggests that psychosocial support is essential for offenders to prevent recidivism.

6.4.2 Theoretical implications

Theoretically, the study encompassed existing social learning theories in the research literature. The study additionally revealed that models of crime have been expanded beyond the basic expected efficacy proposition to include family, community support, peer influences, moral judgments, personality and mental health, which have a relationship with recidivism risk among offenders.

6.4.3 Methodological implications

This is the first study using SEM models to examine the mediating effect of forgiveness, spirituality, religiosity and mental health on the relationship of recidivism risk with personality factors

and social support on recidivism risk, as well as personality factors and social support in the kingdom of Eswatini. In testing the mediation hypothesis, the study adopted the Preacher and Hayes (2004) approach, which assesses mediation by assuming significance of both total and indirect effects.

6.5 Strengths of the study

Study outcomes showed the roles played by personality and social support on recidivism risks among offenders. Recidivism was associated with only the instrumental dimension of social support; a high perception of instrumental support correlates with lower recidivism risk. This implies that there is a need for social support for offenders in order not be at risk of being recidivists.

6.6 Limitations of the study

It is anticipated that the researcher may be confronted with certain limitations, which may call for caution in the interpretations of findings. The study concentrated on only five sampled correctional centres, so other studies can focus on the other six remaining correctional centres, and this will give a better understanding of the other correctional centres as far as recidivism risk is concerned. The following factors call for caution in future studies in interpreting study findings; cross-sectional/correlational approach of the study, composition of more males than female offenders, the use of self-report instruments, skewness in education, marital distributions, duration of imprisonment and type of crime.

The geographical boundaries were narrowly limited to a geographical or administrative sampling of five correctional centres out of eleven, and the setting was restricted. It is suggested, that future studies sample all the correctional centres to expand the study. In addition, a comparative study would be recommended with one of the neighbouring countries to understand the techniques of other countries that have a lower rate of recidivism.

Forthcoming studies should expand upon the finding that the mediating factors (self-competence, resilience and mastery) can mediate to lower recidivism risk. Studies could involve the identification of crucial periods between release and recidivism risk, when interventions may be most effective. This study outlined the different theorists from the angle of framework and perspectives, therefore, the current study

suggested different theories should be investigated so that future research can bridge the gaps of the study for the benefit of psychology and society.

REFERENCES

- (ACBR), A. C. B. R. (2017). 13 Swaziland. 2017(2017), 314-321. https://journals.co.za/content/journal/10520/EJC-99b244578
- Aday, R. H., Krabill, J. J., & Deaton-Owens, D. (2014). Religion in the lives of older women serving life in prison. *Journal of women & aging*, 26(3), 238-256.
- Addad, M. (1987). Neuroticism, extraversion and meaning of life: A comparative study of criminals and non-criminals. *Personality Individual Differences*, 8(6), 879-883.
- Adeleye, N. J., Abdul. (2020). DYNAMIC ANALYSIS OF VIOLENT CRIME AND INCOME INEQUALITY IN AFRICA.
- Adu-Boateng, D. (2019). The Role of Supervised Community Service and Socio-Economic Status in Recidivism Pertaining to Financial Crimes among Ex-Convicts.
- Akers, R. (2017). Social learning and social structure: A general theory of crime and deviance. Routledge.
- Akers, R. L., Krohn, M. D., Lanza-Kaduce, L., & Radosevich, M. (1979). Social learning and deviant behavior: A specific test of a general theory. *American sociological review*, 636-655.
- Alcantud, P. M. (2019). List of Reviewers 2018. Multidisciplinary Journal of Gender Studies, 8(1), 108.
- Amigó, S., Micó, J. C., & Caselles, A. (2017). Five adjectives to explain the whole personality: a brief scale of personality. *Revista Internacional de Sistemas*, 16(1).
- Antwi, A. (2015). Social reintegration of offenders and recidivism in Ghana University of Ghana].

- Aphane, D. (2020). Assessment of Structural, Legal, Policy and Institutional Framework for Implementation of Post Busan Agenda in Swaziland.
- Association, A. P. (2000). Diagnostic and statistical manual of mental disorders: DSM-IV-TR Arlington: American Psychiatric Association.
- Bakken, N. W., DeCamp, W., & Visher, C. A. (2014). Spirituality and desistance from substance use among reentering offenders. *International journal of offender therapy and comparative criminology*, 58(11), 1321-1339.
- Bales, W. D., Nadel, M., Reed, C., & Blomberg, T. G. (2017). Recidivism and Inmate Mental Illness. International Journal of Criminology and Sociology, 6, 40-51.
- Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs, NJ, 1986.
- Barnes, T. R., & Haddad, P. M. (2020). Working with People with Mental Health Difficulties to Improve Adherence to Medication. *The Wiley Handbook of Healthcare Treatment Engagement: Theory, Research, Clinical Practice*, 430-454.
- Bhutta, M. H., Wormith, J. S., & Zidenberg, A. M. (2019). Assessing the Relationship Between Religiosity and Recidivism Among Adult Probationers in Pakistan. *International journal of offender therapy and comparative criminology*, 63(5), 752-780.
- Blanca, M. J., Arnau, J., L_opez-Montiel, D., Bono, R., & Bendayan, R. (2013). Skewness and kurtosis in real data samples. Methodology, 9, 78–84. doi:10.1027/1614-2241/a000057
- Biswalo, P. (2011). The role of adult education in the integration of inmates into society after a jail term: practical experiences from Swaziland. *International Journal of Lifelong Education*, 30(1), 71-81.
- Blonigen, D. M., Macia, K. S., Smelson, D., & Timko, C. J. A. B. (2020). Criminal Recidivism among Justice-Involved Veterans Following Substance Use Disorder Residential Treatment. 106357.

- Boduszek, D., Adamson, G., Shevlin, M., Hyland, P., & Dhingra, K. (2014). Psycho-sociological Investigation of Criminal Behaviour within a Prison Sample Using Retrospective Data. *The Howard Journal of Crime and Justice*, *53*(1), 31-48.
- Bollen, K. A. J. N. Y. (1989). Structural equations with latent variables Wiley.
- Botha, R., Louw, D., & Loots, S. (2018). Psychopathy and its relation to personality psychopathology in a South African female forensic context. *South African Journal of Psychology*, 48(2), 230-242. https://doi.org/doi:http://dx.doi.org/10.1177/0081246317715351
- Breetzke, G. D., Polaschek, D. L., & Curtis-Ham, S. (2019). Does crime count? Investigating the association between neighbourhood-level crime and recidivism in high-risk parolees. *Applied geography*, 102, 20-27.
- Brief, W. P. (2020). *Swaziland/Eswatini*. Retrieved 17/05/2020 from https://www.prisonstudies.org/country/swazilandeswatini
- Cacho Fernández, R. F.-M., Javier López-Goñi, José Javier Arteaga Olleta, Alfonso Haro Escribano, Begoña. (2020). Psychosocial and personality characteristics of juvenile offenders in a detention centre regarding recidivism risk. *The European Journal of Psychology Applied to Legal Context* 12 69-75.
- Carvalho, J. N., Pedro J (2019). Five-factor model of personality and sexual aggression. *International journal of offender therapy comparative criminology*, 63(5), 797-814.
- Cassidy, M. R., Jason (2020). Does Sentence Type and Length Matter? Interactions of Age, Race, Ethnicity, and Gender on Jail and Prison Sentences. *Criminal Justice*
- *Behavior Research Methods, Instruments, & Computers*, 47(1), 61-79.

- Castillo, E. G. I.-M., Roya Shadravan, Sonya Moore, Elizabeth Mensah III, Michael O Docherty, Mary Aguilera Nunez, Maria Gabriela Barcelo, Nicolás Goodsmith, Nichole Halpin, Laura E (2020). Community Interventions to Promote Mental Health and Social Equity. *Focus*, *18*(1), 60-70.
- Caudill, J. W. (2010). Back on the swagger: Institutional release and recidivism timing among gang affiliates. *Youth Violence and Juvenile Justice*, 8(1), 58-70.
- Cerci, D., & Colucci, E. (2018). Forgiveness in PTSD after man-made traumatic events: A systematic review. *Traumatology*, 24(1), 47.
- Cervera, V. G., Loria, C. G., Macedonio Hernandez, C. A., & Carballo Solis, L. M. (2017). Treatment of Adolescents in Conflict with the Law: Towards the Reduction of Recidivism. *US-China L. Rev.*. 14, 671.
- Chabalala, J. (2017). Mental health in prisons. *Mental Health Matters*, 4(3), 38-40. https://journals.co.za/content/journal/10520/EJC-7b66f81ad
- Chen, G. (2020). Violent Crime Among Israeli Inmates: Does Gender Matter? *Feminist Criminology*, 1557085120901861.
- Chioda, L. (2017). Stop the Violence in Latin America: A look at prevention from cradle to adulthood. World Bank Publications.
- Christodoulou, J., Stokes, L. R., Bantjes, J., Tomlinson, M., Stewart, J., Rabie, S., Gordon, S., Mayekiso, A., & Rotheram-Borus, M. J. (2019). Community context and individual factors associated with arrests among young men in a South African township. *PLoS one*, *14*(1), e0209073.
- Cilliers, J., Mostert, K., & Nel, J. (2018). Study demands, study resources and the role of personality characteristics in predicting the engagement of first-year university students. *South African Journal of Higher Education*, 32(1), 49-70.

- Cochran, J. C. (2014). Breaches in the wall: Imprisonment, social support, and recidivism. *Journal of research in crime and delinquency*, 51(2), 200-229.
- Cochran, J. C., Mears, D. P., Bales, W. D., & Stewart, E. A. (2014). Does inmate behavior affect post-release offending? Investigating the misconduct-recidivism relationship among youth and adults. *Justice Quarterly*, 31(6), 1044-1073.
- Cohen, T. H. (2017). Automating Risk Assessment Instruments and Reliability. *Criminology & Public Policy*, *16*(1), 271-279.
- Cuervo, K., Villanueva, L., Basto-Pereira, M. J. C. J., & Behavior. (2020). Prediction of Youth and Adult Recidivism Among Spanish Juveniles Involved in Serious Offenses. 0093854819897282.
- Curlewis, L. G. (2016). Understanding imprisonment an in-depth discussion : feature criminal law & mp; procedure. *De Rebus*, 2016(564), 34-35. http://journals.co.za/content/derebus/2016/564/EJC189349
- Darvyri, P., Galanakis, M., Avgoustidis, A. G., Pateraki, N., Vasdekis, S., & Darviri, C. (2014). The Revised Intrinsic/Extrinsic Religious Orientation Scale in a Sample of Attica's Inhabitants. *Psychology*, *5*(13), 1557.
- Davis, L. J. (2016). The disability studies reader. Routledge.
- de Vries Robbé, M., Mann, R. E., Maruna, S., & Thornton, D. (2015). An exploration of protective factors supporting desistance from sexual offending. *Sexual Abuse*, 27(1), 16-33.
- DeLisi, M. (2018, 2018/05/09/). Race and (antisocial) personality. *Journal of Criminal Justice*. https://doi.org/https://doi.org/10.1016/j.jcrimjus.2018.05.004
- Derdaele, E., Toussaint, L., Thauvoye, E., & Dezutter, J. (2017). Forgiveness and late life functioning: the mediating role of finding ego-integrity. *Aging & mental health*, 1-8.

- Desmarais, S. L., Johnson, K. L., & Singh, J. P. (2016). Performance of recidivism risk assessment instruments in US correctional settings. *Psychological services*, *13*(3), 206.
- Dewa, L. H., Kyle, S. D., Hassan, L., Shaw, J., & Senior, J. (2015, 2015/12/01/). Prevalence, associated factors and management of insomnia in prison populations: An integrative review. *Sleep Medicine Reviews*, 24, 13-27. https://doi.org/https://doi.org/https://doi.org/10.1016/j.smrv.2014.12.002
- Dickson, C. (2014). America's Recidivism Nightmare: A New Government Study Shows a Disturbing Trend for the Prison Population. *The Daily Beast*.
- Duggleby, W., Ploeg, J., McAiney, C., Fisher, K., Swindle, J., Chambers, T., Ghosh, S., Peacock, S., Markle-Reid, M., & Triscott, J. (2017). Study protocol: pragmatic randomized control trial of an internet-based intervention (My tools 4 care) for family carers. *BMC geriatrics*, *17*(1), 181.
- Duncan, J., Stansfield, R., Hall, S., & O'Connor, T. (2018). Women's Engagement with Humanist, Spiritual and Religious Meaning-Making in Prison: A Longitudinal Study of Its Impact on Recidivism. *Religions*, 9(6), 171.
- Duwe, G., & King, M. (2013). Can Faith-BasedCorrectional Programs Work? An Outcome Evaluation of the InnerChange Freedom Initiative in Minnesota. *International journal of offender therapy and comparative criminology*, 57(7), 813-841.
- Eisenbarth, H., Krammer, S., Edwards, B. G., Kiehl, K. A., & Neumann, C. S. (2018). Structural analysis of the PCL-R and relationship to BIG FIVE personality traits and parenting characteristics in an Hispanic female offender sample. *Personality and Individual Differences*, 129, 59-65.
- Eysenck. (2017). Personality and Drugs. In *The Biological Basis of Personality* (pp. 263-318). Routledge.
- Eysenck, H. J. (1996). Personality and the experimental study of education. *European Journal of Personality*, 10(5), 427-439.

- Eysenck, S. B., Eysenck, H. J., & Barrett, P. (1985). A revised version of the psychoticism scale. *Personality and individual differences*, 6(1), 21-29.
- Feminist Criminology, G. D. (2020). Beyond peer influence and selection: A gendered pathways analysis of social environmental predictors of change in child and peer delinquency. *Feminist Criminology*, 15(1), 3-23.
- Ferracuti, S., Mandarelli, G., & Del Casale, A. (2020). Psychopathy, Personality Disorders, and Violence. In *Violence and Mental Disorders* (pp. 81-94). Springer.
- Fetvadjiev, V. H., Meiring, D., Van de Vijver, F. J., Nel, J. A., Sekaja, L., & Laher, S. (2018). Personality and behavior prediction and consistency across cultures: A multimethod study of Blacks and Whites in South Africa. *Journal of personality and social psychology*, 114(3), 465.
- Flesch, J. M. (2015). School Bullying Intervention Programs and the Eight Positive Youth Development Indicators of High-Quality Youth Programs: A Systematic Review and Analysis.
- Frankl, V. (1984). Man's Search for Meaning. New York. 114-119.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological medicine*, 9(1), 139-145.
- Gottfredson, L. S. (2016). Hans Eysenck's theory of intelligence, and what it reveals about him. *Personality and Individual Differences*, 103, 116-127.
- Gould, C. (2015). Beaten bad-the life stories of violent offenders. *Institute for Security Studies Monographs*, 2015(192), 1-144.
- Green, K., & Browne, K. (2019). Personality Disorder Traits, Trauma, and Risk in Perpetrators of Domestic Violence. *International journal of offender therapy and comparative criminology*, 0306624X19826516.

- Griffin, B. J., Worthington Jr, E. L., Lavelock, C. R., Greer, C. L., Lin, Y., Davis, D. E., & Hook, J. N. (2015). Efficacy of a self-forgiveness workbook: A randomized controlled trial with interpersonal offenders. *Journal of Counseling Psychology*, 62(2), 124.
- Gumboh, E. (2017). Examining the application of deterrence in sentencing in Malawi. *Potchefstroom Electronic Law Journal*, 20(1), 1-33. https://doi.org/doi:http://dx.doi.org/10.17159/1727-3781/2017/v20i0a1167
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hawken, A., Kulick, J., Smith, K., Mei, J., Zhang, Y., Jarman, S., Yu, T., Carson, C., & Vial, T. (2016). HOPE II: A follow-up to Hawaii's HOPE evaluation. *Unpublished paper*.
- Heritage, A. J., Long, L. J., Woodman, G. F., & Zald, D. H. (2018). Personality correlates of individual differences in the recruitment of cognitive mechanisms when rewards are at stake. *Psychophysiology*, 55(2), e12987.
- Hester, R. (2019). Prior Record and Recidivism Risk. *American Journal of Criminal Justice*, 44(3), 353-375.
- Ho, T., Rocheleau, G. C. J. W., & Justice, C. (2020). Gender Differences in Risk Assessment Among Youth Adjudicated to Juvenile Correctional Facilities. 1-12.
- Hoge, R. (1972). A validated intrinsic religious motivation scale. *Journal for the scientific study of religion*, 369-376.
- Hoyle, R. H. (2011). Structural equation modeling for social and personality psychology. SAGE Publications Ltd.
- Idemudia, S. (1997). Are people in prisons offenders or patients?: The Eysenck three-factor personality trait explanation. *Ife Psychologia: An International Journal*, *5*(2), 162-184.

- Jamshidzad, M., Maghsoudipour, M., Zakerian, S. A., Bakhshi, E., & Coh, P. (2018). Impact of music type on motor coordination task performance among the introverted and extroverted students. *International Journal of Occupational Safety and Ergonomics*(just-accepted), 1-19.
- Johnson, B. R., Lee, M. T., Pagano, M. E., & Post, S. G. (2016). Positive criminology and rethinking the response to adolescent addiction: evidence on the role of social support, religiosity, and service to others. *International Journal of Criminology and Sociology*, *5*, 172.
- Johnson, S. (2019). Understanding the violent personality: antisocial personality disorder, psychopathy, & sociopathy explored. *Forensic Res Criminol Int J*, 7(2), 76-88.
- Kewley, S., Beech, A. R., & Harkins, L. (2015). Examining the role of faith community groups with sexual offenders: A systematic review. *Aggression and violent behavior*, 25, 142-149.
- Kheswa, J., & Lobi, T. (2014). An investigation of effectiveness of rehabilitation in the correctional centre, Eastern Cape. A phenomenological study. *Mediterranean Journal of Social Sciences*, 5(14), 610.
- Khwela, M. N. (2015). Effects of incarceration on recidivism in South Africa. *Journal of Public Administration*, 50(2), 407-413.
- Kim, B., Benekos, P. J., & Merlo, A. V. (2016). Sex offender recidivism revisited: Review of recent meta-analyses on the effects of sex offender treatment. *Trauma, Violence, & Abuse, 17*(1), 105-117.
- Kingston, D. A., & Olver, M. E. (2017). Psychometric Examination of Treatment Change Among Mentally Disordered Offenders: A Risk–Needs Analysis. *Criminal Justice and Behavior*, 0093854817743539.
- Kiyala, J. C. K. (2019). Transitional Justice from an African Perspective. In *Child Soldiers and Restorative Justice* (pp. 231-258). Springer.

- Klepfisz, G., O'Brien, K., & Daffern, M. (2014). Violent offenders' within-treatment change in anger, criminal attitudes, and violence risk: Associations with violent recidivism. *International Journal of Forensic Mental Health*, 13(4), 348-362.
- Kong, X., Wei, D., Li, W., Cun, L., Xue, S., Zhang, Q., & Qiu, J. (2015). Neuroticism and extraversion mediate the association between loneliness and the dorsolateral prefrontal cortex. *Experimental brain research*, 233(1), 157-164.
- Kopetz, C. E., Woerner, J. I., & Briskin, J. L. (2018). Another look at impulsivity: Could impulsive behavior be strategic? *Social and Personality Psychology Compass*, e12385.
- Krohn, M. D., Lanza-Kaduce, L., & Akers, R. L. (1984). Community context and theories of deviant behavior: An examination of social learning and social bonding theories. *The Sociological Quarterly*, 25(3), 353-371.
- Krohn, M. D., Skinner, W. F., Massey, J. L., & Akers, R. L. (1985). Social learning theory and adolescent cigarette smoking: A longitudinal study. *Social problems*, *32*(5), 455-473.
- Krstic, S., Neumann, C. S., Roy, S., Robertson, C. A., Knight, R. A., & Hare, R. D. (2017). Using Latent Variable-and Person-Centered Approaches to Examine the Role of Psychopathic Traits in Sex Offenders.
- Lama, A. (2017). Practicing Religion and Personal Well-Being among Three Dominant Religions of Sikkim
- Lekalakala, E. R. (2016). A comparative penological study on recidivism
- Lubaale, E. C. (2017). Restorative justice and cases of serious offending: a South African and Canadian perspective. *Obiter*, *38*(2), 296-323. http://journals.co.za/content/journal/10520/EJC-d1f039ca8

- Magagula, N. C., & Hofisi, C. (2018). Reviewing innovation in HIV/AIDS treatment and care in Swaziland. *10*(1), 83-97. https://journals.co.za/content/journal/10520/EJC-e5e66f4af
- Malindisa, L. M., & Winterdyk, J. A. (2015). Corrections and juvenile delinquency in the Kingdom of Swaziland: an exploratory study. *Acta Criminologica: Southern African Journal of Criminology*, 2015(Special Edition 1), 44-61.
- Matshaba, T. D. (2017). Youth offenders' perceptions on the components of the unit management approach: a case study of youth development centres in South Africa. *Acta Criminologica: Southern African Journal of Criminology*, 30(4), 72-91. http://journals.co.za/content/journal/10520/EJC-c3757dac6
- McKinley, S., Patrick, C., & Verona, E. (2018). Antisocial Personality Disorder: Neurophysiological Mechanisms and Distinct Subtypes. *Current Behavioral Neuroscience Reports*, *5*(1), 72-80.
- McNeeley, S. (2017). Do Ecological Effects on Recidivism Vary by Gender, Race, or Housing Type? *Crime & Delinquency*, 0011128717714425.
- Mela, M., Baetz, M., Marcoux, G., Delury, D., Cooper, B., & Sajobi, T. T. (2017). The influence of a learning to forgive programme on negative affect among mentally disordered offenders. *Criminal Behaviour and Mental Health*, 27(2), 162-175.
- Meyer, N., Richter, S. H., Schreiber, R. S., Kloke, V., Kaiser, S., Lesch, K.-P., & Sachser, N. (2016). The unexpected effects of beneficial and adverse social experiences during adolescence on anxiety and aggression and their modulation by genotype. *Frontiers in behavioral neuroscience*, 10, 97.
- Mhlongo, M. D., Tomita, A., Thela, L., Maharaj, V., & Burns, J. K. (2018). Sexual trauma and post-traumatic stress among African female refugees and migrants in South Africa. *The South African journal of psychiatry: SAJP: the journal of the Society of Psychiatrists of South Africa, 24*.

- Minoudis, P., & Kane, E. (2017). It's a journey, not a destination—From dangerous and severe personality disorder (DSPD) to the offender personality disorder (OPD) pathway. *Criminal Behaviour and Mental Health*, 27(3), 207-213.
- Mooney, L., Strelan, P., & McKee, I. (2016). How forgiveness promotes offender pro-relational intentions: The mediating role of offender gratitude. *British journal of social psychology*, 55(1), 44-64.
- Moore, M. D., & Bergner, C. (2016). The relationship between firearm ownership and violent crime. *Justice Policy Journal*, 13, 1-20.
- Motsa, N. D., & Morojele, P. J. (2017). Vulnerable children speak out: voices from one rural school in Swaziland. *15*(1), 8085-8104. https://journals.co.za/content/journal/10520/EJC-87fe76a7e
- Mowen, T. J., Boman, J. H., & Stansfield, R. (2018). Uniting needs, responses, and theory during reentry: The distinct and joint contributions of peer influence and religious/spiritual support on substance use. *Journal of Offender Rehabilitation*, 1-19.
- Mundia, L., Matzin, R., Mahalle, S., Hamid, M. H. S., & Osman, R. S. (2017). Roles of psychopathic personality, mental health, and recidivism in criminal behavior: survey of Brunei inmates. *Asian Journal of Criminology*, 12(4), 255-280.
- Murhula, P. B. B., Singh, S. B., & Nunlall, R. (2019). A Critical Analysis on Offenders Rehabilitation Approach in South Africa: A Review of the Literature. *African Journal of Criminology and Justice Studies: AJCJS*, 12(1), 21-43.
- Musa, A. A. (2016). Predictors of criminal recidivism: A study of recidivists in metropolitan Kano, Nigeria Universiti Utara Malaysia].
- Musekwa, O. P. (2019). Exploring the effectiveness of rehabilitation: A phenomenological study of parole recidivists in Vhembe District, Limpopo Province

- Muthaphuli, P. (2017). Using diversion as a re-entry and treatment practice for young sexual offenders: a case study. *Child Abuse Research in South Africa*, 18(2), 40-49. http://journals.co.za/content/journal/10520/EJC-ad507997f
- Nafekh, M., & Motiuk, L. L. (2002). *The statistical information on recidivism, revised 1 (SIR-R1) scale:* a psychometric examination. Correctional Service of Canada. Research Branch Ottawa, Ontario.
- Nagdee, M., Artz, L., Corral-Bulnes, C., Heath, A., Subramaney, U., de Clercq, H. G., Erlacher, H., Kotze, C., Lippi, G., & Naidoo, S. (2019). The psycho-social and clinical profile of women referred for psycho-legal evaluation to forensic mental health units in South Africa. *South African Journal of Psychiatry*, 25(1).
- Necho, M. B., Asmare Tsehay, Mekonnen Zenebe, Yosef (2020). A meta-analysis of depressive symptoms among Ethiopian prisoners and a narrative description of its associated factors: a country based systematic review and meta-analysis study. *BMC Psychiatry*, 20(1), 1-12.
- Öğülmüş, S., Boysan, M., Fidan-Acar, Ö., & Koca, H. (2020). The underlying dimensions of DSM-5 post-traumatic stress disorder (PTSD) and their relationships with mental and somatoform dissociation, depression and anxiety among jail inmates. *British Journal of Guidance Counselling*, 1-20.
- Olofinbiyi, S. A., Mkhize, S., Dlamini, S., Maluleke, W., & Olofinbiyi, O. B. (2019). Social dimension of risk behaviours among adolescent prostitutes: Insight from South-Western Nigeria. *Cogent Social Sciences*, *5*(1), 1565616.
- Osher, F., & Thompson, M. (2020). Adults with Serious Mental Illnesses Who Are Arrested and Incarcerated. In *The Palgrave Handbook of American Mental Health Policy* (pp. 471-508). Springer.
- Pettus-Davis, C., & Epperson, M. W. (2015). From mass incarceration to smart decarceration.

- Polaschek, D. L., & Wong, S. C. (2020). High-Risk Psychopathic and Violent Offenders. *The Wiley Handbook of What Works in Violence Risk Management: Theory, ResearchPractice*, 369.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models [Article]. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717-731. https://doi.org/10.3758/BF03206553
- Prinsloo, J., & Hesselink, A. (2015). Mental health disorders and crime: an international comparison.

 **Acta Criminologica: Southern African Journal of Criminology, 28(1), 1-11.

 http://journals.co.za/content/crim/28/1/EJC177481
- Ray, S. D., Lockman, J. D., Jones, E. J., & Kelly, M. H. (2019). Psychology of Religion and Spirituality.
- Riola-Parada, C., García-Cañamaque, L., Pérez-Dueñas, V., Garcerant-Tafur, M., & Carreras-Delgado, J. (2016). Simultaneous PET/MRI vs. PET/CT in oncology. A systematic review. *Revista Española de Medicina Nuclear e Imagen Molecular (English Edition)*, 35(5), 306-312.
- Roberts, C. F., Doren, D. M., & Thornton, D. (2002). Dimensions associated with assessments of sex offender recidivism risk. *Criminal Justice and Behavior*, 29(5), 569-589.
- Rubino, L. L., Anderson, V. R., & Campbell, C. A. (2020). An Examination of Racial/Ethnic Disparities in Truancy Court. *Crime Delinquency*, 66(1), 33-58.
- Rye, M. S., & Pargament, K. I. (2002). Forgiveness and romantic relationships in college: Can it heal the wounded heart? *Journal of Clinical Psychology*, *58*(4), 419-441.
- Scanlan, J. M., Yesberg, J. A., Fortune, C.-A., & Polaschek, D. L. (2020). Predicting Women's Recidivism Using the Dynamic Risk Assessment for Offender Re-Entry: Preliminary Evidence of Predictive Validity With Community-Sentenced Women Using a "Gender-Neutral" Risk Measure. *Criminal Justice Behavior Research Methods, Instruments*, & Computers, 0093854819896387.

- Schimmenti, A., Passanisi, A., Pace, U., Manzella, S., Di Carlo, G., & Caretti, V. (2014). The relationship between attachment and psychopathy: A study with a sample of violent offenders. *Current Psychology*, 33(3), 256-270.
- Schnappauf, E. M., & DiDonato, T. E. (2017). From Solitary to Solidarity: Belonging, Social Support, and the Problem of Women's Recidivism. *Modern Psychological Studies*, 23(1), 7.
- Schoeman, M. (2002). A classification system and an inter-disciplinary action plan for the prevention and management of recidivism University of Pretoria].
- Schulenberg, S. E., Hutzell, R. R., Nassif, C., & Rogina, J. M. (2008). Logotherapy for clinical practice. *Psychotherapy: Theory, Research, Practice, Training*, 45(4), 447.
- Schumann, K. (2018). The psychology of offering an apology: Understanding the barriers to apologizing and how to overcome them. *Current Directions in Psychological Science*, *27*(2), 74-78.
- [Record #27 is using a reference type undefined in this output style.]
- Seekings, J. (2016). State-building, market regulation and citizenship in South Africa. *European Journal of Social Theory*, 19(2), 191-209.
- Short Jr, J. F. (2018). *Poverty, ethnicity, and violent crime*. Routledge.
- SI, A. SWAZILAND STATE OF THE YOUTH REPORT 2015.
- Singh, S. B. (2016). Offender rehabilitation and reintegration: a South African Perspective. *Journal of Social Sciences*, 46(1), 1-10.
- Spooner, K., Pyrooz, D. C., Webb, V. J., & Fox, K. A. (2017). Recidivism among juveniles in a multi-component gang reentry program: findings from a program evaluation in Harris County, Texas. *Journal of Experimental Criminology*, 13(2), 275-285.

- Stansfield, R., Mowen, T. J., O'Connor, T., & Boman, J. H. (2017). The role of religious support in reentry: Evidence from the SVORI data. *Journal of research in crime and delinquency*, *54*(1), 111-145.
- Stewart, C. R.-M., Lisa Drum, Lori (2019). The Relationship of Spirituality and Mental Health to Recidivism. *Social Work Christianity*, 46(4).
- Steyn, F., & Booyens, K. (2017). A profile of incarcerated female offenders: implications for rehabilitation policy and practice. *Acta Criminologica: Southern African Journal of Criminology*, 30(4), 33-54. http://journals.co.za/content/journal/10520/EJC-c3731b850
- Steyn, F., & Hall, B. (2015). Depression, anxiety and stress among incarcerated female offenders. *Acta Criminologica: Southern African Journal of Criminology*, 2015(Special Edition 1), 82-100. http://journals.co.za/content/crim/2015/sed-1/EJC179744
- Steyn, F., & Louw, D. (2012). Recreation intervention with adolescent offenders: prospects and challenges in the South African context: recreation. *African Journal for Physical Health Education*, *Recreation and Dance*, 18(2), 423-433. http://journals.co.za/content/ajpherd/18/2/EJC123239
- Strelan, P., McKee, I., & Feather, N. (2016). When and how forgiving benefits victims: Post-transgression offender effort and the mediating role of deservingness judgements. *European Journal of Social Psychology*, 46(3), 308-322.
- Subkoviak, M. J., Enright, R. D., Wu, C.-R., Gassin, E. A., Freedman, S., Olson, L. M., & Sarinopoulos, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of adolescence*, 18(6), 641-655.
- Sukeri, K., Betancourt, O. A., Nagdee, M., Erlacher, H., Emsley, R., & Nagdee, M. (2016). Forensic mental health services: current service provision and planning for a prison mental health service in the Eastern Cape: original research. *South African Journal of Psychiatry*, 22(1), 1-8. https://doi.org/doi:http://dx.doi.org/10.4102/sajpsychiatry.v22i1.787

- Sutherland, E. H. (1939). Principles of criminology (.) JB Lippincott. New York.
- Svendsen, J. M., & Preiholt, H. (2018). Towards a Conceptualization of Recidivism and Repetitive Behavior. *International Journal of Criminology and Sociological Theory*, 10(2).
- Swogger, M. T., Walsh, Z., Christie, M., Priddy, B. M., & Conner, K. R. (2015). Impulsive versus premeditated aggression in the prediction of violent criminal recidivism. *Aggressive behavior*, 41(4), 346-352.
- Tadi, F. N., & Louw, D. A. (2013). First-time offenders versus recidivists: demographic-risk variables.

 **Acta Criminologica: Southern African Journal of Criminology, 26(1), 86-105.

 http://journals.co.za/content/crim/26/1/EJC145829
- Thomas, M. (2020). An Exploration of Recidivism Based on Education and Race.
- Thompson, K. C., & Morris, R. J. (2016). Theories of Juvenile Delinquency. In *Juvenile Delinquency* and *Disability* (pp. 41-53). Springer.
- Tiako, M. J. N., Mori, M., Mahmood, S. U. B., Shioda, K., Mangi, A., Yun, J., & Geirsson, A. (2019). Recidivism is the leading cause of death among intravenous drug users who underwent cardiac surgery for infective endocarditis. Seminars in thoracic and cardiovascular surgery,
- Tiwari, T., Singh, A. L., & Singh, I. L. (2009). The short-form revised Eysenck personality questionnaire: A Hindi edition (EPQRS-H). *Industrial psychiatry journal*, *18*(1), 27.
- Tsur, N., Defrin, R., & Ginzburg, K. (2017). Posttraumatic stress disorder, orientation to pain, and pain perception in ex-prisoners of war who underwent torture. *Psychosomatic medicine*, 79(6), 655-663.

- Tyrer, P., Mulder, R., Kim, Y.-R., & Crawford, M. (2019). The development of the ICD-11 classification of personality disorders: An amalgam of science, pragmatism, and politics. *Annual Review of Clinical Psychology*, *15*, 481-502.
- Uche, N., & Princewill, S. (2015). Clinical factors as predictors of depression in a Nigerian Prison Population. *J Psychiatry*, 18(345), 2.
- van der Put, C. E. A., Mark Gubbels, Jeanne (2020). Differences in Risk Factors for Violent, Nonviolent, and Sexual Offending. *Journal of Forensic Psychology Research Practice*, 1-21.
- Villaseñor, E. (2020). A study on the Contra Costa County Probation Department's Girls in Motion Treatment Program
- Vitopoulos, N. A., Peterson-Badali, M., Brown, S., & Skilling, T. A. (2018). The relationship between trauma, recidivism risk, and reoffending in male and female juvenile offenders. *Journal of Child & Adolescent Trauma*, 1-14.
- Walters, G. D. (2018). Social Control Versus Social Learning: Self-Efficacy for Future Academic Success and Peer Delinquency as Mediators of the Parental Support–Delinquency Relationship. *Criminal Justice Review*, 0734016817753266.
- Walters, G. D., & Espelage, D. L. (2018). From victim to victimizer: Hostility, anger, and depression as mediators of the bullying victimization–bullying perpetration association. *Journal of School Psychology*, 68, 73-83.
- Willis, J. (2019). The Relationship between Emotional Intelligence and Recidivism Among Female Offenders Northcentral University].
- Wilson, T. D. J. U. C. (2018). Is There a Future for Library and Information Work?, 7(1/2), 26-43.

- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and psychological measurement*, 73(6), 913-934.
- Wormith, J. S., Craig, L. A., & Hogue, T. E. (2020). An Overview of Violent Behaviour from Aggression to Homicide. *The Wiley Handbook of What Works in Violence Risk Management: Theory, Research Practice*, 1.
- Yamane, T. (1967). Statistics: an introductory analysis, 2nd edn, Harper and Row, New York.
- Yao, D. J. C., Melody M (2019). When forgiveness signals power: Effects of forgiveness expression and forgiver gender. *Personality Social Psychology Bulletin*, 45(2), 310-324.
- Yoder, J. R., Whitaker, K., & Quinn, C. R. (2017). Perceptions of recidivism among incarcerated youth: The relationship between exposure to childhood trauma, mental health status, and the protective effect of mental health services in juvenile justice settings. *Advances in Social Work, 18*(1), 250-269.
- Zuckerman, M., & Glicksohn, J. (2016). Hans Eysenck's personality model and the constructs of sensation seeking and impulsivity. *Personality and Individual Differences*, 103, 48-52.

APPENDICES

Appendix A: Ethical Clearance Certificate



Private Bag X1290, Potchefstroom South Africa 2520

Tel: 086 016 9698

Web: http://www.nwu.ac.za/

North-West University Health Research Ethics Committee (NWU-HREC)

Tel: 018 299-1206

Email: Ethics-HRECApply@nwu.ac.za (for human

studies)

20 November 2019

ETHICS APPROVAL LETTER OF STUDY

Stu	dy	title:	Psych	iosocial	pa	thways to	o recidivism	risk among	offenders	in	correctional cer	ntres
_												

in the Kingdom of Eswatini

Principal Investigator/Study Supervisor/Researcher: Prof ES

Idemudia Student: WF Tsabedze-21402183

Ethics number:

Institution Study Number Year Status

Status: S = Submission; R = Re-Submission; P = ProvisionalAuthorisation; A = Authorisation

Application Type: Single stud	Appl	ucation	i vpe:	Single	e stua
-------------------------------	------	---------	--------	--------	--------

Commencement date:

20/11/2019

Risk High

Approval of the study is provided for a year, after which continuation of the study is dependent on receipt and review of a three-monthly monitoring report and the concomitant issuing of a letter of continuation. Monitoring reports will be due at the end of February, May, August and November

Based on approval by the North-West University Health Research Ethics Committee (NWU-HREC) on 20/11/2019, the NWU-HREC hereby approves your study as indicated below. This implies that the NWU-HREC grants its permission that, provided the general and specific conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

N W U - 0 0 0 4 6 - 1 9 - A 1

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- The principal investigator/study supervisor/researcher must report in the prescribed format to the NWU-HREC:
 - Three-monthly on the monitoring of the study, whereby a letter of continuation will be provided annually, and upon completion of the study; and
 - without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.
- The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the principal investigator/study supervisor/researcher must apply for approval of these amendments at the NWU-HREC, prior to implementation. Should there be any deviations from the study proposal

9.1.5.4.2 Ethics Approval Letter of Study 1

- In the interest of ethical responsibility, the NWU-HREC reserves the right to:
 - request access to any information or data at any time during the course or after completion of the study;
 - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process;
 - withdraw or postpone approval if:
 - · any unethical principles or practices of the study are revealed or suspected;
 - · it becomes apparent that any relevant information was withheld from the NWU-HREC or that information has been false or misrepresented;
 - · submission of the three-monthly monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and/or
 - · new institutional rules, national legislation or international conventions deem it necessary.
- NWU-HREC can be contacted for further information via Ethics-HRECApply@nwu.ac.za or 018 299 1206

Special in process conditions of the research for approval (if applicable):

a. Please provide the NWU-HREC with copies of the permission letters from the Officer in Charge (OC)/ Director of the correctional facilities to be included, granting access to the potential participants.

As the study progresses the aforementioned conditions should be submitted to Ethics-HRECProcess@nwu.ac.za with a cover letter with a specific subject title indicating "Outstanding documents for approval: NWU-XXXXX-XX." The letter should include the title of the approved study, the names of the researchers involved, that the documents are being submitted as part of the conditions of the approval set by the NWU-HREC, the nature of the document i.e. which condition is being fulfilled and any further explanation to clarify the submission.

The e-mail, to which you attach the documents that you send, should have a specific subject line indicating the nature of the submission e.g. "Outstanding documents for approval: NWU-XXXXX-XX-XX". The e-mail should indicate the nature of the document being sent. This submission will be handled via the expedited process.

The NWU-HREC would like to remain at your service and wishes you well with your study. Please do not hesitate to contact the NWU-HREC for any further enquiries or requests for assistance.

Yours sincerely,

igitally signed by Petra Bester N: cn=Petra Bester, =AUTHER, ou=NWU, Faculty of

ate: 2019.11.21 19:50:26 02'00'

107

Appendix B: Demographic Questionnaire

Instructions: Please answer the following questions about your demographic characteristics. The information will be kept confidential and will only be used to prepare a general profile of study participants.

1.	Age:	
2.	Gender a. Female b. Male	
3.	Education a. Grade School b. High School c. Associate Degree g. Other:	d. Bachelor's Degree e. Master's f. Doctorate
4.	Preferred Racial/Ethnic Identity:	
5.	Marital Status a. Married b. Single c. Widowed d. Other c. Divorced	
6.	Type of crime:	
7.	Duration of imprisonment:	

Appendix C: Recidivism-risk scale

(Nafekh & Motiuk, 2002)

Instruction: write the response next to the question asked.

1.	Current offence	
2.	Age at admission	
3.	Previous incarceration	
4.	Revocation or forfeiture	
5.	Act of escape	
6.	Security classification	
7.	Age at first adult conviction	
8.	Previous convictions for assault	
9.	Marital status at most recent admission	
10.	Interval at risk since last offence	
11.	Number of dependants at most recent	
	admission	
12.	Current total aggregate sentence	
13.	Previous convictions for sex offences	
14.	Previous convictions for breaking and	
	entering	
15.	Employment status at arrest	

Appendix D: Eysenck Personality scale Eysenck *et al.* (1985), a revised version of the P scale Short-scale EPQ-R

Tick the response that is most true for you.

	Items	YES	NO
1.	Does your mood often go up and down?		
2.	Do you take much notice of what people think?		
3.	Are you a talkative person?		
4.	If you say you will do something, do you always keep your		
	promise no matter how inconvenient it might be?		
5.	Do you ever feel 'just miserable 'for no reason?		
6.	Would being in debt worry you?		
7.	Are you rather lively?		
8.	Were you ever greedy by helping yourself to more than your share		
	of anything?		
9.	Are you an irritable person?		
10.	Would you take drugs which may have strange or dangerous		
	effects?		
11.	Do you enjoy meeting new people?		
12.	Have you ever blamed someone for doing something you knew		
	was really your fault?		
13.	Are your feelings easily hurt?		
14.	Do you prefer to go your own way rather than act by the rules?		
15.	Can you usually let yourself go and enjoy yourself at a lively		
	party?		
16.	Are all your habits good and desirable ones?		
17.	Do you often feel 'fed-up.?		
18.	Do good manners and cleanliness matter much to you?		
19.	Do you usually take the initiative in making new friends?		
20.	Have you ever taken anything (even a pin or button) that belonged		
	to someone else?		
21.	Would you call yourself a nervous person?		
22.	Do you think marriage is old-fashioned and should be done away		
	with?		

23.	Can you easily get some life into a rather dull party?	
24.	Have you ever broken or lost something belonging to someone	
	else?	
25.	Are you a worrier?	
26.	Do you enjoy co-operating with others?	
27.	Do you tend to keep in the background on social occasions?	
28.	Does it worry you if you know there are mistakes in your work?	
29.	Have you ever said anything bad or nasty about anyone?	
30.	Would you call yourself tense or 'highly-strung'?	
31.	Do you think people spend too much time safeguarding their	
	future with savings and insurances?	
32.	Do you like mixing with people?	
33.	As a child were you ever cheeky to your parents?	
34.	Do you worry too long after an embarrassing experience?	
35.	Do you try not to be rude to people?	
36.	Do you like plenty of bustle and excitement around you?	
37.	Have you ever cheated at a game?	
38.	Do you suffer from 'nerves'?	
39.	Would you like other people to be afraid of you?	
40.	Have you ever taken advantage of someone?	
41.	Are you mostly quiet when you are with other people?	
42.	Do you often feel lonely?	
43.	Is it better to follow society's rules than go your own way?	
44.	Do other people think of you as being very lively?	
45.	Do you always practice what you preach?	
46.	Are you often troubled about feelings of guilt?	
47.	Do you sometimes put off until tomorrow what you ought to do	
	today?	
48.	Can you get a party going?	

Appendix E: Berlin Social Support Scales (BSSS)
(Schwarzer & Schulz, 2000) Endorsements (for all BSSS scales):
Perceived Emotional Support, Perceived Instrumental Support,
Need for Support & Support Seeking

Please think of persons who are close to you. Tick the response that is most true for you

(1) Strongly disagree (2) Somewhat disagree (3) Somewhat agree (4) Strongly agree

	(1)	(2)	(3)	(4)
Perceived Emotional Support				
1. There are some people who truly like me.				
2. Whenever I am not feeling well, other people show me that they are				
fond of me.				
3. Whenever I am sad, there are people who cheer me up.				
4. There is always someone there for me when I need comforting.				
Perceived Instrumental Support				
1. I know some people upon whom I can always rely.				
2. When I am worried, there is someone who helps me.				
3. There are people who offer me help when I need it.				
4. When everything becomes too much for me to handle, others are there				
to help me.				
Need for Support				
1. When I am down, I need someone who boosts my spirits.				
2. It is important for me always to have someone who listens to me.				
3. Before making any important decisions, I absolutely need a second opinion.				
4. I get along best without any outside help. (-)				
Support Seeking				
1. In critical situations, I prefer to ask others for their advice.				
2. Whenever I am down, I look for someone to cheer me up again.				
3. When I am worried, I reach out to someone to talk to.				

4. If I do not know how to handle a situation, I ask others what they		
would do.		
5. Whenever I need help, I ask for it.		

Appendix F: The forgiveness scale (Rye & Pargament, 2002)

Think of how you have responded to the person who has wronged or mistreated you. Indicate the degree to which you agree or disagree with the following statements.

1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree

ITEM		5.	4.	3.	2.	1.
1	I can't stop thinking about how I was wronged by this person					
2	I wish for good things to happen to the person who wronged me					
3	I spend time thinking about ways to get back at the person who wronged me					
4	I feel resentful toward the person who wronged me					
5	I avoid certain people and/or places because they remind me of the person who wronged me					
6	I pray for the person who wronged me					
7	If I encountered the person who wronged me I would feel at peace					
8	This person's wrongful actions have kept me from enjoying life					
9	I have been able to let go of my anger toward the person who wronged me					
10	I become depressed when think of how I was mistreated by this person					
11	I think that many of the emotional wounds related to this person's wrongful actions have healed					
12	I feel hatred whenever I think about the person who wronged me					
13	I have compassion for the person who wronged me					
14	I think my life is ruined because of this person's wrongful actions					
15	I hope the person who wronged me is treated fairly by others in the future					

Appendix G: Forgiveness likelihood scale (Rye & Pargament, 2002)

Imagine the scenarios below happened to you. Based on the information provided, consider the likelihood that you would choose to forgive the person. Then, tick the response that is most true for you.

1. Not at all likely 2. Slightly Likely 3. Somewhat Likely 4. Fairly Likely 5. Extremely Likely

ITEM	5	4	3	2	1
1. You share something embarrassing about yourself to a friend who					
promises to keep the information confidential. However, the friend					
breaks his/her promise and proceeds to tell several people. What is					
the likelihood that you would choose to forgive your friend?					
2. One of your friends starts a nasty rumour about you that is not					
true. As a result, people begin treating you worse than they have in					
the past. What is the likelihood that you would choose to forgive					
your friend?					
3. Your significant other has just broken up with you, leaving you					
hurt and confused. You learn that the reason for the break up is that					
your significant other started dating a good friend of yours. What is					
the likelihood that you would choose to forgive your significant					
other?					
4. A family member humiliates you in front of others by sharing a					
story about you that you did not want anyone to know. What is the					
likelihood that you would choose to forgive the family member?					
5. Your significant other has a "one night stand" and becomes					
sexually involved with someone else. What is the likelihood that you					
would choose to forgive your significant other?					
6. Your friend has been talking about you behind your back. When					
you confront this person, he/she denies it, even though you know					
that he/she is lying. What is the likelihood that you would choose to					
forgive your friend?					

7. A friend borrows your most valued possession, and then loses it. The friend refuses to replace it. What is the likelihood that you			
would choose to forgive your friend?			
8. You tell an acquaintance about a job that you hope to be hired for. Without telling you, the acquaintance applies and gets the job for him/herself. What is the likelihood that you would choose to forgive your acquaintance?			
9. A stranger breaks into your house and steals a substantial sum of money from you. What is the likelihood that you would choose to forgive the stranger?			
10. You accept someone's offer to attend a formal dance. However, this person breaks their commitment to take you and goes to the event with someone who they find more attractive. What is the likelihood that you would choose to forgive this person?			

Appendix H: Spirituality Well-Being Scale - Ellison, 1983 revised by Darvyri *et al.* (2014) Please indicate your level of agreement with the following statements by circling the appropriate number that corresponds with the answer key.

Key: 1. Strongly Disagree 2. Disagree 3. Mostly disagree 4. Mostly agree 5. Agree 6. Strongly Agree

1 2 3 4 5 6 16. I find meaning in my life experiences. 17. I have a sense of purpose. 18. I am happy about the person I have become. 19. I see the sacredness in everyday life. 20. I meditate to gain access to my inner spirit 21. I live in harmony with nature. 22. I believe there is a connection between all things that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people. 36. Prayer is an integral part of my spiritual nature.								1
17. I have a sense of purpose. 18. I am happy about the person I have become. 19. I see the sacredness in everyday life. 20. I meditate to gain access to my inner spirit 21. I live in harmony with nature. 22. I believe there is a connection between all things that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.			1	2	3	4	5	6
18. I am happy about the person I have become. 19. I see the sacredness in everyday life. 20. I meditate to gain access to my inner spirit 21. I live in harmony with nature. 22. I believe there is a connection between all things that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	16.	I find meaning in my life experiences.						
19. I see the sacredness in everyday life. 20. I meditate to gain access to my inner spirit 21. I live in harmony with nature. 22. I believe there is a connection between all things that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	17.	I have a sense of purpose.						
20. I meditate to gain access to my inner spirit 21. I live in harmony with nature. 22. I believe there is a connection between all things that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	18.	I am happy about the person I have become.						
21. I live in harmony with nature. 22. I believe there is a connection between all things that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	19.	I see the sacredness in everyday life.						
22. I believe there is a connection between all things that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	20.	I meditate to gain access to my inner spirit						
that I cannot see but can sense. 23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	21.	I live in harmony with nature.						
23. My life is a process of becoming. 24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	22.	I believe there is a connection between all things						
24. I believe in a Higher Power/Universal Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.		that I cannot see but can sense.						
Intelligence. 25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	23.	My life is a process of becoming.						
25. I believe that all living creatures deserve respect. 26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	24.	I believe in a Higher Power/Universal						
26. The earth is sacred. 27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.		Intelligence.						
27. I value maintaining and nurturing my relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	25.	I believe that all living creatures deserve respect.						
relationships with others. 28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	26.	The earth is sacred.						
28. I use silence to get in touch with myself. 29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	27.	I value maintaining and nurturing my						
29. I believe that nature should be respected. 30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.		relationships with others.						
30. I have a relationship with a Higher Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	28.	I use silence to get in touch with myself.						
Power/Universal Intelligence. 31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	29.	I believe that nature should be respected.						
31. My spirituality gives me inner strength. 32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	30.	I have a relationship with a Higher						
32. I am able to receive love from others. 33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.		Power/Universal Intelligence.						
33. My faith in a Higher Power/Universal Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	31.	My spirituality gives me inner strength.						
Intelligence helps me cope during challenges in my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	32.	I am able to receive love from others.						
my life. 34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.	33.	•						
34. I strive to correct the excesses in my own lifestyle patterns/practices. 35. I respect the diversity of people.								
35. I respect the diversity of people.	34.	-						
		lifestyle patterns/practices.						
36. Prayer is an integral part of my spiritual nature.	35.	I respect the diversity of people.						
	36.	Prayer is an integral part of my spiritual nature.						

Appendix I: 10-Item Hoge intrinsic religiosity scale- (Hoge, 1972)

Please indicate your level of agreement with the following statements by circling the appropriate number that corresponds with the answer key.

Strongly disagree = 1 Disagree = 2 Neutral = 3 Agree = 4 Strongly agree = 5

ITEMS		1	2	3	4	5
1	My faith involves all of my life					
2	In my life, I experience the presence of the Divine (i.e, God)					
3	Although I am a religious person, I refuse to let religious considerations influence my everyday affairs (reverse score)					
4	Nothing is as important to me as serving God as best as I know how					
5	My faith sometimes restricts my actions					
6	My religious beliefs are what really lie behind my whole approach to life					
7	I try hard to carry my religion over into all my other dealings in life					
8	One should seek God's guidance when making every important decision					
9	Although I believe in religion, I feel there are many more important things in life (reverse score)					
10	It does not matter so much what I believe as long as I lead a moral life (reverse score)					

Appendix J: The scaled General Health Questionnaire (Goldberg & Hillier, 1979)

The 28-items of the scaled version of the GENERAL HEALTH QUESTIONNAIRE

It is important that you try to answer ALL the questions. Thank you very much for your cooperation.

HAVE YOU RECENTLY:

		YES	NO
1.	Been feeling perfectly well and in good health?		
2.	Been feeling in need of a good tonic?		
3.	Been feeling run down and out of sorts?		
4.	Felt that you are ill?		
5.	Been getting any pains in your head?		
6.	Been getting a feeling of tightness or pressure in your		
	head?		
7.	Been having hot or cold spells?		
8.	Lost much sleep over worry?		
9.	Had difficulty in staying asleep once you are off?		
10.	Felt constantly under strain?		
11.	Been getting edgy and bad-tempered?		
12.	Been getting scared or panicky for no good reason?		
13.	Found everything getting on top of you?		
14.	Been feeling nervous and strung-up all the time?		
15.	Been managing to keep yourself busy and occupied?		
16.	Been taking longer over the things you do?		
17.	Felt on the whole you were doing things well?		
18.	Been satisfied with the way you've carried out your		
	task?		
19.	Felt that you are playing a useful part in things?		
20.	Felt capable of making decisions about things?		
21.	Been able to enjoy your normal day-to-day activities?		
22.	Been thinking of yourself as a worthless person?		
23.	Felt that life is entirely hopeless?		
24.	Felt that life isn't worth living?		

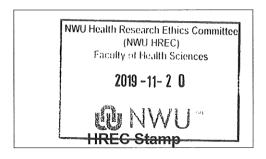
25.	Thought of the possibility that you might make away	
	with yourself?	
26.	Found at times you couldn't do anything because your	
	nerves were too bad?	
27.	Found yourself wishing you were dead and away from	
	it all?	
28.	Found that the idea of taking your own life kept coming	
	into your mind?	

Appendix K: Informed consent form (English and Siswati Version)



Private Bag X1290, Potchefstroom

South Africa 2520 Tel: +2718 299-1111/2222 Fax: +2718 299-4910 Web: http://www.nwu.ac.za



INFORMED CONSENT DOCUMENTATION FOR **OFFENDERS**

TITLE OF THE RESEARCH STUDY: Psychosocial pathways to recidivism-risk among offenders in correctional centres in the Kingdom of Eswatini.

ETHICS REFERENCE NUMBERS: NWU-00046-19-S1

PRINCIPAL INVESTIGATOR: Prof. Erhabor S. Idemudia

POST GRADUATE STUDENT: WANDILE FUNDO TSABEDZE (21402183)

ADDRESS: 1134 NGAKA TSATSI STREET, MONTSHIWA, MMABATHO, MAHIKENG.

CONTACT NUMBER: 073 046 8123/76265526

You are being invited to take part in a **research study** that forms part of my/our **Doctor of Philosophy in Psychology (PhD).** Please take some time to read the information presented here, which will explain the details of this study. Please ask the researcher or person or research assistant explaining the research to you any questions about any part of this study that you if do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Also, your participation is **entirely voluntary** and you are free to say no to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part now.

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU-00046-19-51) and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other international ethical guidelines applicable to this study. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

What is this research study all about?

- This study will be conducted at His Majesty's Correctional Service in the Kingdom of
 Eswatini. It will involve questionnaires with experienced researchers trained in the
 method.
- The aims of the study are:
- i) The first aim of the study is to examine the relationship between personality, mental health, gender, age, types of crime, duration of imprisonment, forgiveness, spirituality, religion, social support and recidivism risk.
- ii) The second aim of the study is to investigate whether psychological factors (personality and mental health) and social-demographic variable (gender, age, types of crime and duration of imprisonment) will directly predict recidivism risk among offenders.
- iii) The third aim of the study is to also investigate whether the mediating roles of forgiveness, spirituality/religion and social support will mediate between psychosocial factors and recidivism risk of offenders.

Why have you been invited to participate?

- 1. You have been invited to be part of this research because you meet the following inclusion criteria an adult male or female offender at Eswatini correctional centre who will remain convicted for at least one year incarceration in order to be able to complete and participate in data collection; you are efficiently fluent, read and write English or Siswati.
- 2. Apart from the inclusion criteria indicated above, there are no other exclusion criteria except if you are in the Vulamasango Juvenile Centre.
- 3. You will unfortunately not be able to take part in this research if you are under the age of 18 years old, awaiting trials and remand.

What will be expected of you?

You will be requested to complete a biographical questionnaire once off, which will ask questions regarding your age, education, marital status, Preferred Racial/Ethnic Identity, Marital Status, type of crime and duration of imprisonment followed by the scales which will be used in the study No information that can identify you will be asked in the questionnaire.

Will you gain anything from taking part in this research?

- The research may have direct benefits for you as the study tent to decrease the recidivism risk rate and which may contribute to your well-being.
- Another benefit will be your experience and knowledge gained about the how to avoid recidivism behaviour, for example through social support, forgiveness, spirituality and religiosity. Should you be released, you will leave with new empowering skills to face the strains of everyday living and avoiding recidivism. These values can be taught to your children, family, friends and fellow inmates. This can change a whole generation which started with your participation and willingness to learn.
- A possible indirect benefit is that the knowledge gained through this research may benefit offenders by providing insight on the recidivism risk and the inclusion of prevention and intervention programmes.
- The results of the study will be made available to you once the study is complete in the form of a presentation by the researcher. If you are released before this time, you

(Wandile Tsabedze {21402183}) on page 3

123

will have the option to provide your contact details to the researcher so that he can supply you with a typed summary of the findings.

Are there risks involved in you taking part in this research and what will be done to prevent them?

- This is a high risk study. You may experience forms of physical- and psychological harm. Regarding possible physical harm, you may experience fatigue during collection of data. If this occurs, you will be provided with an opportunity to rest or take a break during the data collection three times a day to rest.
- HREC will be notified immediately by the researcher if an adverse event occurs.
- Psychological harm may be experienced during data collection as some items in the scale
 maybe may be very emotional. In light of this, support services, in which the researcher will
 not be personally involved, will therefore be provided (by a qualified professional social
 worker and clinical psychologist located at the correctional centre) to participants who suffer
 adverse effects and on the participants' request.
- There will be no financial costs involved in participating in this study.
- Due to the fact that during the sessions a warder or wardress will be involved for security purposes they will sign confidentiality agreement.

How will we protect your confidentiality and who will see your findings?

Only the research team, namely, the student researcher and study leader will have access to the data. The statistician will sign a confidentiality agreement form.

Anonymity will be protected: 1) Only the informed consent form you sign will have your name on it and informed consent forms will be stored separately from other data to protect your identity (please see section on "What will happen to the data" for more information on how all data will be handled), 2) No names will be mentioned in the dissertation or reporting or publishing of the research.

With your permission, a summary of the results will be made available to the management of His Majesty's Correctional Headquarters Research Section and may be presented to them on request. This will be anonymous, except for the reports that are requested by the social welfare section.

What will happen with the findings or samples?

- This is a once off data collection (after completion of the questionnaires you will not be required to participate in data collection again for this study) and data will be analysed in South Africa.
- Data will be stored for a period of seven years after the publication of the results as required by the NWU.
- For the duration of data analysis, the hard copies of collected will be kept in a locked cupboard at Ipilegeng Psychology Centre. The data will be stored on the researcher's personal computer, which is password protected. The researcher will send electronic copies of the data to the statistician for analyses. The statistician will be requested to delete this information as soon as the data analyses is complete and will sign a confidentiality agreement.
- After the completion of data analyses, hard copies of informed consent forms and
 data will be kept in a locked cupboard in a locked office of the project supervisor at
 the NWU and electronic data will be saved on a computer in the locked NWU office
 (Ipelegeng Child Centre) which has password protection.
- After the data has been stored for a period of seven years, it will be destroyed by a
 member of the research team. Hard copies will be shredded and electronic copies
 deleted from the computer it was stored on.

How will you know about the results of this research?

- The findings of the research will be shared with you through a presentation by the
 researcher after the completion of the study. If you are released before this time,
 you will have the option to provide your contact details to the researcher so that
 he can supply you with a typed summary of the findings.
- With your permission, the findings will also be made available to the His Majesty's Correctional Service Headquarters at the Research Department, and be advised to apply or improve based from the results.

Will you be paid to take part in this study and are there any costs for you?

This study is funded by the North West University Postgraduate bursary and there are no conflict of interest.

- No, you will not be paid to take part in the study.
- You will also receive a token of appreciation which includes toiletries (e.g. soap/rollon/toothpaste/toothbrush/facecloth/shampoo/body cream, etc.) if approved by His Majesty's Correctional Service.

Is there anything else that you should know or do?

- If you have any questions or concerns during or after signing this form an appointment will be made with you where the researcher will be present to answer any questions you may have or request a social worker or psychologist to contact Wandile Tsabedze at 073 046 8123 or wandile.tsabedze@gmail.com on your behalf since you do not have access to phones and internet.
- You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl
 at 018 299 1206 or <u>carolien.vanzyl@nwu.ac.za</u> if you have any concerns that were
 not answered about the research or if you have complaints about the research.
- You will receive a copy of this information and consent form for your own purposes.

Declaration by participant			
By signing below, I			
I declare that:			
I have read this information/it was expla- language with which I am fluent and comfo			
• The research was clearly explained to me.			
I have had a chance to ask questions to be me, as well as the researcher and all my qu			
 I understand that taking part in this stuce pressurised to take part. 	dy is voluntary and I have not been		
 I may choose to leave the study at any time way if I do so. 	e and will not be handled in a negative		
• I may be asked to leave the study before it in the best interest, or if I do not follow the			
Signed at (place)	on (<i>date</i>)		
Signature of participant	Signature of witness		
Declaration by person obtaining consent			

(Wandile Tsabedze {21402183}) on page 7

127

I Sifiso Shabangu declare that:		
• I clearly and in detail explained the information in this document to		
• I did/did not use an interpreter.		
• I encouraged him/her to ask questions and took adequate time to answer them.		
• I am satisfied that he/she adequately understands all aspects of the research, as discussed above		
• I gave him/her time to discuss it with others if he/she wished to do so.		
Signed at (<i>place</i>) on (<i>date</i>) 20		
Signature of person obtaining consent		

Declaration by researcher

I (name) Wandile Tsabedze declare that:

- I explained the information in this document to Sifiso Shabangu who is trained for this purpose.
- I did not use an interpreter as Sifiso Shabangu can speak both Swati and English.
- I encouraged him to ask questions and took adequate time to answer them
 or I will be available should he want to ask any further questions.
- The informed consent was obtained by an independent person.

•	I am satisfied that he adequately understands all aspects of the research, as described above.
9	I am satisfied that he had time to discuss it with others if he wished to do so.
Signed	at (place) on (date)

Signature of researcher

Confidentiality Agreement



CONFIDENTIALITY UNDERTAKING
Entered into between:
I, the undersigned
Prof / Dr / Mr / Ms
Identity Number:
Address:
Hereby undertake in favour of the NORTH-WEST UNIVERSITY, a public higher education institution established in terms of the Higher Education Act No. 101 of 1997
Address: Office of the Institutional Registrar, Building C1, 53 Borcherd Street, Potchefstroom, 2520
(Hereinafter the "NWU")
1 Interpretation and definitions
1.1 In this undertaking, unless inconsistent with, or otherwise indicated by the context:
1.1.1 "Confidential Information" shall include all information that is confidential in its nature or marked as confidential and shall include any existing and new information obtained by me
(Wandile Tsahedze (21402183)) on page 10

130

after the Commencement Date, including but not be limited in its interpretation to, research data, information concerning research participants, all secret knowledge, technical information and specifications, manufacturing techniques, designs, diagrams, instruction manuals, blueprints, electronic artwork, samples, devices, demonstrations, formulae, know-how, intellectual property, information concerning materials, marketing and business information generally, financial information that may include remuneration detail, pay slips, information relating to human capital and employment contract, employment conditions, ledgers, income and expenditures and other materials of whatever description in which the NWU has an interest in being kept confidential; and

- 1.1.2 "Commencement Date" means the date of signature of this undertaking by myself.
- 1.2 The headings of clauses are intended for convenience only and shall not affect the interpretation of this undertaking.

2 Preamble

- 2.1 In performing certain duties requested by the NWU, I will have access to certain Confidential Information provided by the NWU in order to perform the said duties and I agree that it must be kept confidential.
- 2.2 The NWU has agreed to disclose certain of this Confidential Information and other information to me subject to me agreeing to the terms of confidentiality set out herein.
- 3 Title to the Confidential Information

I hereby acknowledge that all right, title and interest in and to the Confidential Information vests in the NWU and that I will have no claim of any nature in and to the Confidential Information.

4 Period of confidentiality

The provisions of this undertaking shall begin on the Commencement Date and remain in force indefinitely.

5 Non-disclosure and undertakings

I undertake:

5.1 To maintain the confidentiality of any Confidential Information to which I shall be allowed access by the NWU, whether before or after the Commencement Date of this undertaking. I will not divulge or permit to be divulged to any person any aspect of such Confidential Information otherwise than may be allowed in terms of this undertaking;

(Wandile Tsabedze {21402183}) on page 11

5.2 to take all such steps as may be necessary to prevent the Confidential Information falling into the hands of an unauthorised third party;

- 5.3 not to make use of any of the Confidential Information in the development, manufacture, marketing and/or sale of any goods;
- 5.4 not to use any research data for publication purposes;
- 5.5 not to use or disclose or attempt to use or disclose the Confidential Information for any purpose other than performing research purposes only and includes questionnaires, interviews with participants, data gathering, data analysis and personal information of participants/research subjects;
- 5.6 not to use or attempt to use the Confidential Information in any manner which will cause or be likely to cause injury or loss to a research participant or the NWU; and
- 5.7 that all documentation furnished to me by the NWU pursuant to this undertaking will remain the property of the NWU and upon the request of the NWU will be returned to the NWU. I shall not make copies of any such documentation without the prior written consent of the NWU.

6 Exception

The above undertakings by myself shall not apply to Confidential Information which I am compelled to disclose in terms of a court order.

7 Jurisdiction

This undertaking shall be governed by South African law be subject to the jurisdiction of South African courts in respect of any dispute flowing from this undertaking.

8 Whole agreement

- 8.1 This document constitutes the whole of this undertaking to the exclusion of all else.
- 8.2 No amendment, alteration, addition, variation or consensual cancellation of this undertaking will be valid unless in writing and signed by me and the NWU.

Dated at Mafikeng Campus this	_20
Witnesses:	
1	
2	
(Signatures of witnesses)	(Signature)

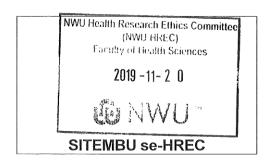
(Wandile Tsabedze {21402183}) on page 12



Private Bag X1290, Potchefstroom

South Africa 2520

Tel: +2718 299-1111/2222 Fax: +2718 299-4910 Web: http://www.nwu.ac.za



SATISO SESIVUMELWANO SESICELO SETIVAKASHI TENGWENYAMA

SIHLOKO SELUCWANINGO: Kucwaninga imbangela yekuboshwa ngalokuphindzekile kutivakashi teNgwenyama eminyango yekucondzisa tigwegwe eveni lase Swatini.

INOMBOLO YELUCWANINGO: NWU-00046-19-S1

UMHLOLI LOMKHULU WELUCWANINGO: Prof. Erhabor S. Idemudia

UMFUNDZI WEMFUNDVO LEPHAKEME (BUDOKOTELA): WANDILE FUNDO TSABEDZE (21402183)

LIKHELI LEMFUNDZI: 1134 NGAKA TSATSI STREET, MONTSHIWA, MMABATHO, MAHIKENG.

INOMBOLO YELUCINGO: 073 046 8123/76265526

Uyamenywa kuba yincenye yelucwaningo lwami lweticu tebudokotela - Doctor of Philosophy in Psychology (PhD). Uyacelwa kutsi ufundzisise ngekujula ngalolucwaningo kute utokona kuvisasa, ucondzisise kutsi lumayelana nani. Uvumelekile kubuta imibuto kulowenta lolucwaningo, umusiti wakhe, noma ngubani lotabe akhona asita ngalolucwaningo kutsi lumayelana nani. Kumcoka kusti wati kutsi lolucwaningo lumayelana nani nekutsi wenetiseke ngetinchazelo lonikwe tona kulabakusitako, nekutsi wena lolucwaningo lukumbandzakanya kanjani. Lokunye lokumele ukwati kutsi awukaphocelelwa kutsi ubeyincenye yalolucwaningo uyavolontiya, kute lokutawukhinyabeta sigwebo sakho noma inhlala kahle yakho, uvumelekile kwala uma ungafuni kuba yincenye yalolucwaningo. Uvumelekile nekuyekela emkhatsini noma ngabe besewucalile kubayincenye yalolucwaningo.

Lolucwaningo luvunyelwe likomidi lelihlola kutsi lucwaningo lusemtsetfweni noma cha eNyuvensi North-West eningizimu Africa - Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University, (NWU-00046-19-S1). Lolucwaningo lutawentiwa kulandzelwa yonkhe imihambo, imigomo, tinchabekelwane kanye netindlela lebekwe ngulelikomidi (DoH 2015) kanye naleminye imitsetfo yemave emhlaba lengamele lucwaningo lolunjengalolu. Kumucoka kutsi bemitsetfo yekucwaninga kutsi babukete kutsi lolucwaningo luhambakahle nangendlela lebekiwe futsi.

Lolulcwaningo lumayelana nani?

- Lolucwaningo lutabe lwentelwa etiko lekucondzisa tigwegwe etivakashini teNgwenyama eSwatini. Utawuphendvula imibuto lobutwe yona, bosocwaningo labaceceshiwe batabe basita kulolucwaningo.
- Imigomo yalolucwaningo:
- Umgomo wekucala walolucwaningo kuhlolisisa budlelwane emkhatsini wesimilo, temphilo ngengcondvo, bulili, iminyaka, licala, sigwebo, kucola, inkholo, kukholwa, kusekwa kanye nekuboshwa kaningi.
- ii) Umgomo wesibili kuhlolisisa kutsi ngabe similo ne temphilo ngengcondvo kanye ne bulili, iminyaka, licala, sigwebo kungabangela kutsi bantfu baboshwe kaningi.
- iii) Umgomo wesitsatfu kubuketa kutsi kucolela, inkholo, kukholwa kanye neku sekwa kuyalehlisa yini lizinga lekuboshwa kaningi etivakashini teNgwenyama.

Sizatfu sekumenywa kwakho kutsi ubeyincenye yalolucwaningo?

- Umenywe kulolucwaningo ngoba unaletimphawu letilandzelako: uwesilisa noba sifazane, usivakashi seNgwenyama etikweni lekucondzisa tigwegwe lotawugcinwa umunyaka munye, kute ucedze lolucwaningo futsi uyakhona kukhuluma phindze ubhale lulwimi lweSiswati nelweSilungu.
- Awukavumeleki kuba yincenye yalolucwaningo nangabe useVulamasango Juvenile Centre.
- Awukavumeleki kubayincenye yalolucwaningo nangabe uneminyaka lengephansi kwelishumi nesiphohlongo (18) futsi awukagwetjwa.

Yini lichaza lakho kulolucwaningo?

Utawucelwa kutsi ugcwalise imininingwane yakho kuleliphepha lotabe uligcwalisa lefaka ekhatsi umnyaka wakho, lizinga lemfundvo lofike kulo, libala lakho, luhlobo lwebucala nesigwebo sakho. Angeke uphocelelwe kutsi ubhale ligama lakho noma unike imininingwane letawukwenta kutsi watiwe kutsi ungubani.

Lwati luni lotalitfola kulolucwaningo?

- Lolucwaningo lungasita inhlala kahle yangamunye ngamunye kuvikela kuboshwa kaningi.
- Lolucwaningo lutosita nemimango yetfu kutsi yati kutsi kushoni kuboshwa kaningi futsi kungavikeleka kanjani nekutsi yini lebanga kuboshwa kaningi.
- Lolucwaningo litosita kutsi kube netindlela letingasungulwa kutsi kuvikeleke kubasengotini yekuboshwa kaningi nekutsi bungagwenya kanjani bucala nekuboshwa kaningi.
- Imiphumela yalolucwaningo itovetwa ngumucwaningi naseluphelile lolucwaningo.
 Nakungentaka ukhululwe emunyangweni yekucondzisa tigwegwe ingakaphumi imiphumela uvumelekile kutsi ushiye inombolo yelucingo lapho ungatsintfwa khona kute utfole imphumela ngalo lucwaningo.

Ngabe bukhona yini bungoti bekutimbandzakanya kulolucwaningo futsi bungavikeleka kanjani?

- Bungoti bukhona. Kungenteka udzinwe enyameni nekudzinwa ngengcondvo, kepha utawunikwa sikhatsi sekuphumula usagcwalisa noma usaphendvula imibuto. Utophumula katsatfu ngelilanga kute utokhona kucedza ingcondvo isengakadzinwa.
- Litiko le-HREC litokwatisiwa nangabe kunetingcinamba letivelako kusentiwa lolucwaningo.
- Kukhatsateka kungahle kwenteka nangane kunemibuto letsintsa simo loke wabhekana naso noma lesikuvisa buhlungu. Nangabe kwenteka utsikameteka, kunabosonhlalakahle nobosongcondvongcondvo labangakusita kwendlula kulesimo, labasongcondvo baceceshiwe.
- Kute lapho kudzingeka khona tindleko kute ubeyincenye yalolucwaningo
- Tindvuna leticondzisa tigwegwe titobakhona kute kutsi sihambisane nemitsetfo yalelitiko lekucondzisa tigwegwe.

Butawuvikelwa kanjani bunguwe bakho (imfihlo) nekutsi ngubani lotoba nemvume kubona imiphumela yalolucwaningo?

Labalandzelakho ngulabatawukwati umphumela walolucwaningo: licembu lalelucwaningo lokufaka ekhatsi umfundzi lowenta lolucwaningo naloyo lamsitako, kanye nalona lotabe enta tibalo talelucwaningo naye lotawusayina lifomu lekutibophelela kutsi kute layawuke akhiphele khona lemiphumela yalolucwaningo.

Kutaba nemfihlo: 1) Utosayina satiso sesivumelwano sesicelo setivakashi tengwenyama lesitaba neligama lakho, sitawuhlukaniswa nalapho kunemininingwane yakho loyigcwalisile kute kutsi ivikeleke.

Ngemvume yakho, imiphumela lefinyetiwe yalolucwaningo itawunikwa labenta luphenyo endlunkhulu yetekucondzisa tigwegwe — His Majesty's Correctional Services Headquarters Research Section. Imiphumela legcwele inganiketwa uma bayicela. Loku kutawuchubeka kwentiwe ngekungakhiphi emagama ebantfu. Lihovisi letenhlalakahle liwawunikwa imiphumela.

Itowentiwani imiphumela yaloluphenyo?

 Lolucwaningo lutokwentiwa kanye (uma sewucwalisile emafomu lanemibuto, angeke uphindze ucelwe kutsi ugcwalise lamanye). Utotsi ungagcwalisa phindze uphendvule imibuto leto timphendvulo tiyohlatiywa eNingizimu Afrika.

- Imiphumela inawugcinwa iminyaka lesikhombisa endzaweni lephephile eNyuvesi ye North-West.
- Imphumela itogcineka lakuphephekhona esisefeni sase-Ipilegeng Psychology Centre.
 Lapho khona kutaba netinombolo letifihlakele kuvikela kutsi kubebete lokhona kufundza lemiphumela.
- Emuva kwekutsi lemiphumela igcinwe iminyaka lesikhombisa itawucinywa phindze kwentiwe siciniseko kutsi lena lengamphepha iyashiswa.

Utokwatiswa kanjani ngemiphumela yeluphenyo?

- Imiphumela itawkwetfulwa kuwe ngumfundzi lowenta lucwaningouma acedza kwenta loluphenyo. Uma kwenteka ukhululwa lungakapheli lolucwaningo, ungashiya inombolo yakho yelucingo lapho lowenta luphenyo angakutfumelela lemiphumela.
- Ngevume yakho, litiko lekucondzisa tigwegwe litowatiswa ngemiphumela kuze lati kutsi lingatfutfukisa kanjani imphatfo yetivakashi teNgwenyama letikulelitiko.

Tindleko?

Lolucwaningo tindleko talo titobe tibhadalwa yinyuvesi yeNorth-West.

- Angeke ubhadalwe kuba yincenye yalolucwaningo, kepha:
- Kutoba nesibongo lesilingene nangabe litiko lekucondzisa tigwegwe livuma.

Lokufaele ukwati ngalolucwaningo noma ukwente?

- Nangabe kukhona lokungacondzakali noma lokukukhatsatako kulelifomu, ungacela sonhlalakahle noma songcondvo kutsi atsintsane na Wandile Tsabedze ngelucingo kunayi inombolo 073 046 8123 noma likheli wandile.tsabedze@gmail.com
- Lokunye ningatsintsana namabhalane welikomide le-Health Research Ethics Committee Mrs. Carolien van Zyl kulenombolo 018 299 1206 noma carolien.vanzyl@nwu.ac.za nangabe kunetinkinga letivelako kusentiwa lolucwaningo.
- Imininingwane yonkhe utayitfola.

(Wandile Tsabedze {21402183} Siswati Informed Consent form) on page 5

137

Imvumo
Mine ngiyavuma kubayincenye yalolucwaningo sihlokosalo lesitsi: Kubuketa tindlela tekunciphisa kuboshwa kaningi eSwatini.
Ngiyavuma kutsi: • Ngifundzile ngavisisa kutsi yini lebhekeke kimi, ngachazeleka ngelulwimi lengiluvako ngumuntfu lengimtsembako.
 Lolucwaningo luchaziwe ngaluva kutsi lumayelana nani.
Imibuto yami iphendvulekile.
Angikaphocelelwa kutsi ngibeyincenye yalolucwaningo
Ngingashiya ekhatsi nangabe seningafuni kuchubeka nalolucwaningo
Sayina ku-(<i>indzawo</i>)(<i>lilanga nemunyaka</i>)20
Sayila la. Sayina fakazi

Appendix L: Interpretation letter

18 November 2019

TO WHOM IT MAY CONCERN

CERTIFICATE OF LANGUAGE INTERPRETATION (SISWATI)

I, Mzwandile Zwelakhe Masondo, confirm and certify that I have read through and interpreted the scales of the study entitled: "Psychosocial pathways to recidivism-risk among offenders in correctional centres in the Kingdom of Eswatini" by Wandile F. Tsabedze, promoter of the study is Prof ES Idemudia.

I hold a Bachelor of Arts in Humanities majoring in African Languages and English Language and I am qualified to edit academic work of such nature for cohesion and coherence.

The views and research procedures detailed and expressed in the scales remain those of the researcher/s.

Yours sincerely

Mzwandile Zwelakhe Masondo (BA of arts in Humanities African Languages) University of Eswatini (UNISWA)

Cell +268 7626 5526

Email- lakhemasondo@gmail.com

Appendix M: Letter to Correctional Services seeking for permission



Attention:

The Commissioner General His Majesty's Correctional Services P.O. Box 166 H100 Mbabane The Kingdom of Eswatini

Prof. Erhabor S. Idemudia PROFESSOR OF RESEARCH (SOCIAL SCIENCE CLUSTER) SCHOOL OF RESEARCH & POSTORADUATE STUDIES FACULTY OF HUMAN AND SOCIAL SCIENCES

NORTH WEST UNIVERSITY PRIVATE BAO X2046 MAFIKENG CAMP MMABATHO, 2735 South Africa

+27-18-389-2899 +27 - 72 - 795 - 3933 Paner. PAX: +27-18-389-2424

www: http://myprofile.cos.com/sundayidemudia

http://groups.vahos.com/group/WorldCouncil PsychotherapyAfricanchagter

South Africa, August 21, 2018

RE: PERMISSION TO CONDUCT RESEARCH IN THE DEPARTMENT OF WCP PACE CORRECTIONAL SERVICE: Mr Wandile Tsabedze (21402183).

Dear Sir,

I am writing as the PhD Promoter for Mr Wandile Tsabedze who proposes a study titled "Psychosocial pathways to Recisivism among offenders in the correctional centres in the Kingdom of Estwatini: A mediation Study".

The Purpose of the study is to understand why criminals return to prisons after initial incarcerations. Data will be collected using a questionnaire. The study will in general obey all ethical rules of confidentiality for data and participants (please see attached proposal).

Due to the sensitivity of the study, the University requires that Mr Tsabedze gets an ethics clearance from the correction department of the country to enable him

commence his studies.

No TH - WEST VERSITY Y PARTESTY YA BOKONE - BOPHIRIMA ./CORDWES-UNIVERSITEIT MAFIKEN CAMPUS

2018 -08- 2 2

Department or an analogy (Ipelegeng Child & Family Centre) Faculty of Human and Social Sciences Private Bag X2046, Mmabatho 2735

1|Page

It is on this note that I request an ethics clearance and certificate be given to him as a matter of urgency.

Thank you

Yours truly,

Erhabor S. IDEMUDIA, (PhD Clinical Psy) Professor of Research (Social Science Cluster)

Visiting Professor, Jacobs University, Bremen, BIGSSS (South Hall), Campus Ring 1, 28759 Bremen, Germany

Email: s.idemudia@jacobs-university.de

Tel: Cell.+49.1521.864.7616/Office: +49.421.200 3969

Rm G60, Building A2 Block 1, Faculty of the Human & Social Sciences, North-West University (MC) Private Bag X2046, Albert Luthuli/University Drive, Mmbatho, 2735, South Africa.

Phone: +27.18.389.2899/Fax: +27.18.389.2424/ Cell: +27.72.795.3933/

Email: erhabor.idemudia@nwu.ac.za

- Visiting Scholar, Department of Psychology, Semel Institute, UCLA, USA
- Visiting Professor, Covenant University, Nigeria.
- Fellow, Alexander von Humboldt Foundation, Germany
- NRF Established Research Scientist, South Africa
- 2015 Recipient of the Georg-Forster Life-Time Achievement in Research Research Award Germany.

http://www.theafricancourier.de/europe/why-african-youths-are-observed with-europe/
https://www.humboldt-foundation.de/web/kosmos-interviews-en-ten-additional-en-ten-addition ORTH VABO

http://www.zdf.de/ZDFmediathek/beitrag/video/259370 ntte è usonte-

Hoffnung-auf-besseres-Leben

http://www.mvcr.cz/migrace/soubor/52-54-25-26-201

http://www.nwu.ac.za/content/nwu-mafikeng-campus-n -board

https://www.researchgate.net/home

The least of the last of the l

2|Page

Appendix N: Permission letter from correctional centre



Telephone: +268 2404 2476/7/8

Telefax: +268 2404 3357

Services Website: hht://www.gov.sz

Email: Corrcom1@yahoo.com

The Commissioner General His Majesty's Correctional P. O. Box 166 MBABANE, Swaziland

27th August, 2018

Wandile F. Tsabedze

P.O Box 692

Manzini

Dear Sir,

RE: PERMISSION TO CONDUCT A STUDY.

- 1. The above-captioned subject matter refers.
- Please note that permission has been granted to Mr Wandile F Tsabedze to conduct a study at Correctional Centres on the topic: PSYCHOLOGICAL PATHWAYS TO RECIDIVISM AMONG OFFENDERS IN THE CORRECTIONAL CENTRES IN THE KINGDOM OF ESWATINI: A MEDIATION STUDY.
- For logistics, kindly liaise with the Research, Development and Planning Office at the
 Correctional Headquarters. Also, kindly bring this letter and your National (ID) with when you
 come to do the study for ease of reference thereof.

Sincerely,

P.N Dlamini (Commissioner)

FOR: COMMISSIONER GENERAL OF CORRECTIONAL SERVICES

Cc: Commandant, Officers-in-Charge;

Matsapha Correctional Centre

Bhalekane Correctional Centre

Piggs Peak Correctional Centre

Big Bend Correctional Centre

COMMISSIONER GENERAL OF CORRECTIONAL SERVICES

2 7 AUG 2018

P.O. BOX 166, MBABANE H100 SWAZ(LAND TEL: (+268) 2404 2476/7/8 Mawelawela Correctional Centre Nhlangano Correctional Centre Mbabane Correctional Centre Manzini Remand Centre Mankayane Correctional Centre Criminal Mental Health Centre



2 4 AUG 2018

P.O. BOX 166, MBABANE H100 SWAZILAND TEL: (+268) 2404 2476/7/8

COMMISSIONER GENERAL OF CORRECTIONAL SERVICES

2 7 AUG 2018

P.O. BOX 166, MBABANE H100 SWAZILAND TEL: (+268) 2404 2476/7/8

Appendix O: Approval of documents submitted during the progress of the study



Prof ES Idemudia Psychology COMPRES Private Bag X6001, Potchefstroom South Africa 2520

Tel: 018 299-1111/2222 Web: http://www.nwu.ac.za

Health Sciences Ethics Office for Research,

Training and Support

North-West University Health Research Ethics Committee (NWU-HREC)

Tel: 018-299 2092

Email: wayne.towers@nwu.ac.za

23 March 2020

Dear Prof Idemudia

APPROVAL OF DOCUMENTS SUBMITTED DURING THE PROGRESS OF THE STUDY

Ethics number: NWU-00046-19-A1

Kindly use the ethics reference number provided above in all future correspondence or documents submitted to the administrative assistant of the North-West University Health Research Ethics Committee (NWU-HREC).

Study title: Psychosocial pathways to recidivism risk among offenders in correctional centres in the

Kingdom of Eswatini

Study leader: Prof ES Idemudia Student: WF Tsabedze-21402183 Application type: Single study

Risk level: High (monitoring report required three-monthly)

Expiry date: 30 November 2020 (Monitoring reports will be due at the end of February, May, August

and November annually until completion)

You are kindly informed that the documentation submitted to the NWU-HREC, as per the conditions set in your approval letter, was reviewed by the designated reviewers. The reviewers have indicated that the submitted documents are acceptable and that you as the researcher can proceed with implementing the aforementioned documentation in your approved project.

We wish you the best as you conduct your research. If you have any questions or need further assistance, please contact the Faculty of Health Sciences Ethics Office for Research, Training and Support at Ethics-HRECApply@nwu.ac.za.

Yours sincerely

Digitally signed by Wayne Towers Date: 2020.03.23 18:21:50 +02'00'

Head: Health Sciences Ethics Office for Research, Training and Support

Current details: (23239522) G:\text{My Drive\9}. Research and Postgraduate Education\9.1.5.3 Letters Templates\9.1.5.4.1_In-Progress_Approval_letter_HREC.docm 30 April 2018

File reference: 9.1.5.4.1

Appendix P: Advertisement poster

