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*Data Privacy and Access Control in Health and Social Science
Research among Vulnerable & Protected Persons: Reflections from
Research at a Correctional Facility in South Africa*

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Introduction

- The need to protect the privacy of research participants in public health and social science research studies cannot be over-emphasized
- In particular, data collected from vulnerable populations and/or with protected populations require additional safeguards
- We investigated the associations between mental health, substance use, appetitive aggression, and recidivism among youth offenders at a correctional facility in South Africa.

Introduction [2]

- The research ethics committee of the South African Department of Correctional Services provides guidance on participant vulnerability
- They serve as gate-keeper of ethics and regulatory compliance including additional safeguards to protect offender and researcher rights and safety
- This case study presents reflections on fieldwork and data management in a protected environment including ethical considerations related to data access, protection, and privacy.
- Data management in protected environments such as correctional facilities mandates ethical considerations related to data access, protection, and privacy to protect offender and researcher rights and safety

Study Background & Context

The Study

- An investigation into the relationship between mental health and recidivism among incarcerated youth offenders: The intervening role of substance use and appetitive aggression

Background and context

- The contribution of mental illness, substance use, and appetitive aggression to recidivism has significant policy and practice implications
- In South Africa's post-Apartheid era, social conditions promote violence and crime as normative while simultaneously using punitive measures to correct the behavior.
- Thus, studies seeking to understand crime in South Africa cannot view it in isolation and disregard the historical and psychosocial impact crime has on rehabilitation and reintegration.

Problem Statement

- Offenders with untreated mental illness have a higher recidivism rate and a greater number of criminogenic risk factors than those without mental illness
- Recidivism ranges between 80%-94%, and many offenders recidivate in less than six months to a year (Padayachee, 2008);
- Recidivism range between 55%-95% (Schoeman, 2013);
- Recidivism range between 50%-70% among offenders who recidivate within three years. The impact of educational programs reduce recidivism by at least 29% (Khwela, 2014);
- Karrim (2018) estimated that 90% of South African offenders are repeat offenders.
- Studies investigating the nature and extent of recidivism and available statistics on recidivism in South Africa vary and are dispersed; however, estimates indicate that it is unacceptably high.

Aim and Objectives

Aim: To utilise a cross-sectional research design to investigate the relationship between mental health and recidivism among incarcerated youth offenders and the intervening roles of substance use and appetitive aggression

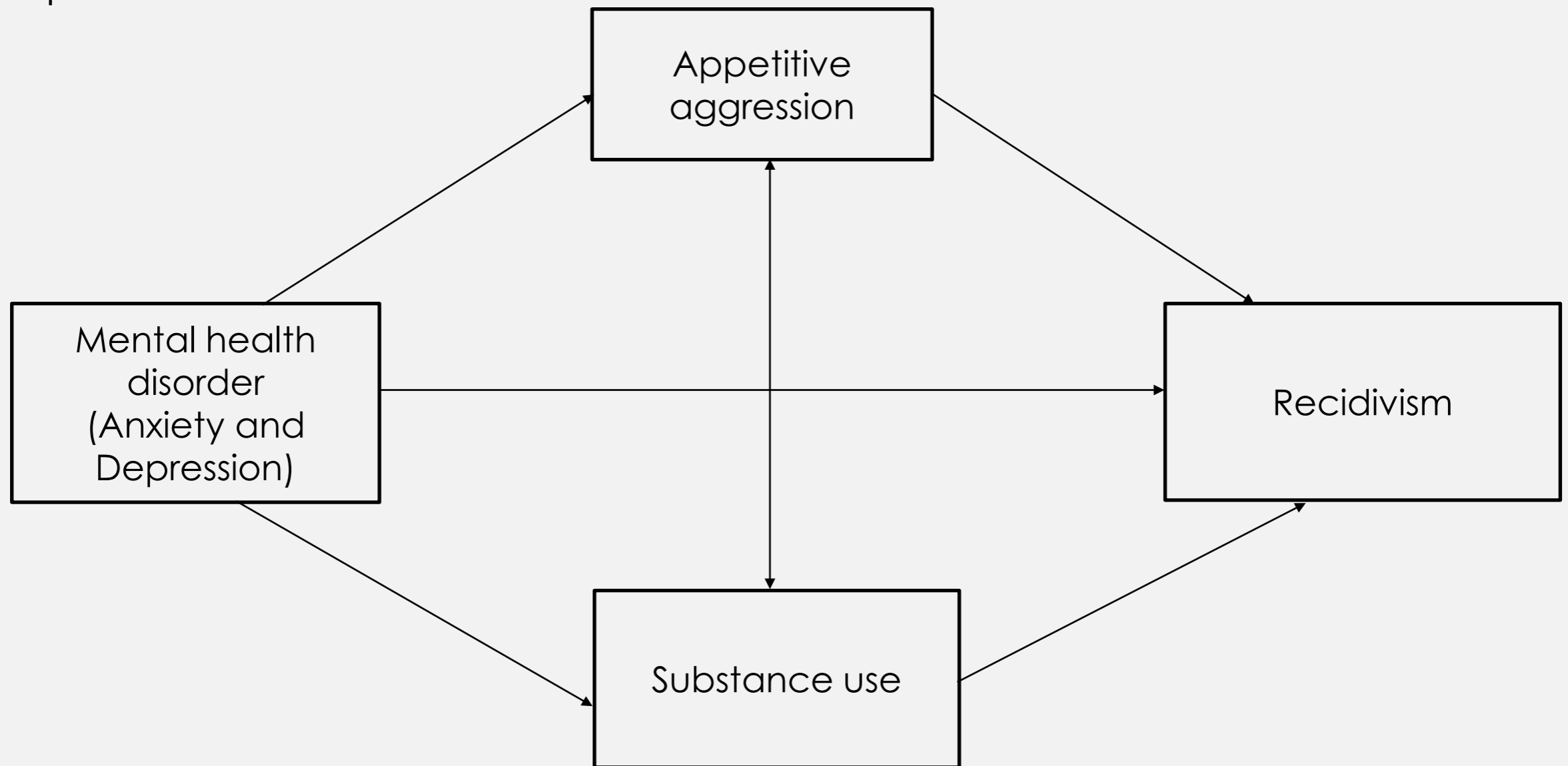
Specific Objectives

1. Examine the nature and extent of recidivism among youth offenders.
2. Assess the prevalence and correlates of mental health disorders and recidivism among youth offenders.
3. Examine the relationship between mental health disorders, appetitive aggression, and recidivism among youth offenders.
4. Examine the role of substance use on the relationship between mental health and recidivism.

Hypotheses

We hypothesized that among incarcerated offenders:

1. Mental health disorders predict recidivism; and
2. Appetitive aggression and substance use play intervening roles on the relationship between mental health disorders and recidivism among this population.



Hypothesized model of the central study variables

Study Site & Location

- The research was conducted at the Durban-Westville correctional facility in KwaZulu-Natal, South Africa.
- The correctional facility is divided into five mediums, i.e., units where offenders are housed according to the security risk, which ranges from minimum to maximum.
- Medium A houses awaiting trial detainees, medium B is a maximum-security medium for sentenced male offenders, medium C is for short-to-medium-term sentenced offenders, medium D is for juvenile offenders, and medium E is for female offenders (Singh, 2008)

Population and Sampling

Population: Incarcerated offenders. Juveniles below the age of 18 were excluded from participating in the study

Participant selection/sampling

- This study used **multi-stage cluster sampling**, where participants were systematically selected from existing correctional facility mediums treated as clusters, namely, medium B, D, and E.
- Sample: Three hundred and sixteen (316) **offenders aged 18 to 35** participated in the study

Data Collection Approach

- A **self-administered, hard-copy structured questionnaire** was used to collect data.
- In cases where participants could not read or write, one-to-one interviews were held with the researcher in the presence of a correctional facility warden who was within visual but not hearing distance **[no absolute privacy]**
- Data were collected within the **correctional facility** between **June and August 2018**.

Data and metadata

Instrumentation, Variables, and Measures

- Self-administered structured questionnaire
- Socio-demographic information
- History of incarceration
- Hopkins Symptoms Checklist (HSCL)- The HSCL-25 consists of two parts:
 - Part 1 has ten items for anxiety symptoms, e.g., “Suddenly scared for no reason”
 - Part 2 has 15 items for depression symptoms, e.g., “Feeling hopeless about the future.”
 - Participants had to rate each item on a 4-point Likert scale (“Not at all,” “A little,” “Quite a bit,” and “Extremely” rated 1 to 4, respectively).

Data and metadata [2]

Instrumentation, Variables, and Measures

- Appetitive aggression- The scale consists of 15 statements on a 5-point Likert scale, ranging from totally disagree (0), disagree (1), neither agree nor disagree (2), agree (3), and totally agree (4). For example, “Is it exciting for you if you make a person really suffer?”
- CRAFFT measure of substance use (Car, Relax, Alone, Forget, Family or Friends, Trouble)- CRAFFT is a dichotomous measure with nine items with No (0) and Yes (1) as response options. For example, “Does your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?”
- Recidivism - re-incarceration and was measured by the number of times offenders have been sentenced to a correctional facility. Sentenced once=0 and sentenced two or more time= 1
- Data was analysed using SPSS v26.

Key Ethical Consideration : Human Participants' Protection

- Incarcerated offenders are considered vulnerable in research as they can be susceptible to coercion and undue influence. Therefore, it was pivotal to consider and apply ethics.
- The research study was approved by the University of Cape Town Department of Social Work research ethics committee as well as by the Department of correctional services.
- On site, It was further approved by the area commissioner and the heads of the correctional facility mediums.
- Participation was voluntary, which was confirmed by obtaining signed informed consent forms from participants. For participants who could not read and write, verbal consent and an informed consent form marked with an X to indicate consent were obtained.

Key Ethical Consideration : Human Participants' Protection[2]

- Before completing the questionnaire, participants were briefed on the purpose of the research and their rights to participate, refuse to participate, and withdraw without any consequence
- Participants were also asked not to write any identifying information such as names, ID numbers, or incarceration IDs on the form to ensure anonymity.
- Participants were informed that their information would remain confidential.

Key Results

- A recidivism rate of **32.4% (n=82)** among this population
- Cluster analysis showed that the combination of anxiety, depression, substance use, and appetitive aggression increased the likelihood of recidivism.
- **Appetitive aggression played a key role in distinguishing recidivism risk among recidivist and non- recidivist participants.**
- Combined factors that increase the likelihood of recidivism provide a typology for classifying offenders based on particular recidivism risk determinants, which offers insights for developing tailored interventions that address a combination of factors.

Reflections: Challenges & Opportunities

- Challenges around data availability and access
- 6 months embargo for internal publication of thesis within the University of Cape Town library
- Undergo a review of the dissertation and get approval from the Department of Correctional Services before findings could be published in any research journals or presented at any conference, workshop.
- Data accessible from the researcher however, users need to specify for what purpose the data will be used
- Publication and data access restrictions

Implications for Open Science

- Data privacy vocabulary (DPV)
- Metadata preparation
- Controlled variable development
- Data governance and stewardship
- Application of FAIR Data Principles (Findable, Accessible, Interoperable, and Reusable)
- Data generated from health and social science research with vulnerable populations (e.g., incarcerated individuals) poses critical questions and highlights challenges related to privacy, access, data protection and the implementation of open science

Implications for Open Science

- Limitations related to the implementation of data privacy and access control are shown to pose serious challenges for data documentation, discovery and the interoperability of data and metadata
- There is a need for international collaboration for capacity strengthening and human capital development on the *FAIR* principles and open science in the social and behavioral sciences stakeholders of public and private sectors on the African continent

References

- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of mental disorders (4th ed)*. Washington, DC. Doi:10.1176/appi.books.9780890423349.
- Karrim, A. A. (2018). Focus on punishment fails society and inmates: Correctional services spend far too much on prisons and too little on rehabilitation and reintegration. Published in *Business Day News*, 12 April. South Africa.
- Khwela, M. N. (2014). A Need to Re-integrate Prisoners to the Community: A Case of Polokwane Medium B Prison, South Africa. *Athens Journal of Social Sciences*, 1: 145-155.
- Padayachee, V. (2008). Department of Correctional Services Republic of South Africa: creating paths for offender reintegration conference. Pretoria: Hotel Kameldift East. [Online] Available: [https://www.issafrica.org/crimehub/uploads-/Offender Reintegration-Conference-Report4.pdf](https://www.issafrica.org/crimehub/uploads-/Offender%20Reintegration-Conference-Report4.pdf) [Retrieved: 20/11/2018]
- Schoeman, M. (2013). *A Classification System and an Inter-disciplinary Action Plan for the Prevention and Management of Recidivism*. Pretoria: University of Pretoria.
- Weierstall, R. & Elbert, T. (2011). The Appetitive Aggression Scale-development of an instrument for the assessment of human's attraction to violence. *European Journal of Psychotraumatology*, 2: 1- 11. DOI: 10.3402/ejpt.v2i0.8430

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Ngiyabonga !!
Thank you !!