RELATIONSHIP BETWEEN ADVERSE CHILDHOOD EXPERIENCES AND CRIMINAL BEHAVIOR: A CASE OF INMATES IN SELECTED MAXIMUM-SECURITY PRISONS IN NAIROBI CITY COUNTY, KENYA

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DECLARATION PAGE

This thesis is my original work and has not been presented to any college or university for academic credit

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DEDICATION

I dedicate this thesis to my beloved family whose unwavering encouragement and support have been the foundation to my progress. May this achievement inspire their pursuit for knowledge and positive change without limits.

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ABSTRACT

Adverse Childhood Experiences have been linked to criminal behavior in various global studies; however, limited research has explored this relationship in the Kenyan context. This study examined the relationship between ACEs and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. The research was grounded in Psychoanalytic Theory and Social Learning Theory, which explain how early childhood experiences shape adult behavior patterns and how behaviors are acquired through observation and reinforcement. A correlational design with a mixed-methods approach was employed, integrating quantitative and qualitative data collection methods. The target population consisted of 4,200 inmates from Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison, along with 30 key informants comprising prison counsellors, wardens, and probation officers. Stratified random sampling was used to select 351 inmate participants, achieving an inmate response rate of 88.0% comprising 309 participants, while all 30 key informants participated giving a 100% key informant response rate. Data collection utilized structured questionnaires comprising demographic information, the Adverse Childhood Experiences Questionnaire, and the Brief COPE questionnaire for inmates, along with semi-structured interview guides for key informants. Quantitative data were analyzed using SPSS version 28 for descriptive and inferential statistics, while qualitative data underwent thematic analysis. Results related to the first objective revealed that the overall prevalence of adverse childhood experiences among inmates was 92.6%, with verbal abuse through swearing, insulting, and humiliation being the predominant type of adverse childhood experience affecting 83.2% of inmates, while pushing, grabbing, and slapping was the most prevalent physical abuse type affecting 69.6% of respondents. The mean ACE score was 1.8 with a standard deviation of 0.9, indicating substantial childhood trauma exposure among the prison population studied. Regarding the second and third objectives, moderate positive correlations were found between emotional abuse and criminal behavior at r equals 0.452 with p less than 0.001, and between physical abuse and criminal behavior at r equals 0.389 with p less than 0.001, demonstrating that both forms of childhood abuse were significantly associated with increased criminal behavior among inmates. Regarding the fourth objective, the evaluation of institutional strategies used to support inmates in coping with adverse childhood experiences revealed that while a range of strategies including counselling, anger management, mentorship, and spiritual guidance existed within the selected facilities, key informants identified resource constraints, inadequate trauma-informed training among staff, and environmental barriers as the primary challenges limiting the effectiveness of these institutional strategies. The study concluded that adverse childhood experiences were highly prevalent among maximum-security prison inmates and significantly associated with criminal behavior patterns. Recommendations included implementing systematic ACE screening protocols, adopting comprehensive trauma-informed care approaches, providing specialized staff training, and developing national policy frameworks for trauma-informed corrections in Kenya.

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ABBREVIATIONS AND ACRONYMS

ACE: Adverse Childhood Experiences

ACE-Q: Adverse Childhood Experience Questionnaire

AIDS: Acquired Immune Deficiency Syndrome

APA: American Psychological Association

BMC: BioMed Central

CEA: Coping and Emotional Adjustment

CDC: Centre for Disease Control and Prevention

CMC: Computer-Mediated Communication

CODs: Co-Occurring Disorders

COVID-19: Coronavirus Disease 2019

CPA: Child Physical Abuse

DOI: Digital Object Identifier

DSM: Diagnostic and Statistical Manual of Mental Disorders

EA: Emotional Abuse

EEG: Electroencephalography

EI: Emotional Intelligence

FBI: Federal Bureau of Investigation

GST: General Strain Theory

HIV: Human Immunodeficiency Virus

IPV: Intimate Partner Violence

IQ: Intelligence Quotient

ISBN: International Standard Book Number

JAMA: Journal of the American Medical Association

MACP: Multidimensional Assessment of Coping Profile

MRI: Magnetic Resonance Imaging

NACOSTI: National Commission for Science, Technology and Innovation

NHS: National Health Service

NJ: New Jersey

PA: Physical Abuse

PCA: Principal Component Analysis

PCEs: Positive Childhood Experiences

PTSD: Post-Traumatic Stress Disorder

RV: Research Variable

SAGE: SAGE Publications

SAJP: South African Journal of Psychiatry

SLT: Social Learning Theory

SPSS: Statistical Package for the Social Sciences

UK: United Kingdom

UNICEF: United Nations International Children's Emergency Fund

UNODC: United Nations Office on Drugs and Crime

USA: United States of America

VACS: Violence Against Children and Youth Surveys

WHO: World Health Organization

OPERATIONAL DEFINITION OF TERMS

Adverse Childhood Experiences: These refer to all types of abuse, neglect, traumatic experiences, and other stressful events that occur in a person's life before they are 18 years of age (Bhargav and Swords, 2024). In this study, adverse childhood experiences were limited to emotional abuse and physical abuse, specifically verbal abuse through swearing insulting and humiliation, threats of physical harm, feeling unloved or unimportant, family lack of closeness or support, pushing grabbing or slapping, hitting causing marks or injuries, and witnessing domestic violence, as captured in the Adverse Childhood Experiences Questionnaire.

Coping Strategies: Refers to behavioral and cognitive tactics used to manage crises, conditions, and demands that are appraised as distressing, particularly in the context of the psychological effects of adverse childhood experiences (Mkumbo et al., 2023). In this study, coping strategies were limited to the fourteen strategies captured through the Brief COPE questionnaire, namely active coping, planning, positive reframing, acceptance, humor, religion, emotional support seeking, instrumental support seeking, self-distraction, denial, venting, substance use, behavioral disengagement, and self-blame.

Criminal Behavior: This refers to any overt or covert actions that violate legal laws of a given country and often lead to prosecution and are punishable upon conviction (Cornell Law School, 2022). In this study, criminal behavior was limited to actions defined as offenses under the Penal Code of Kenya, specifically violent offenses, property crimes, drug-related offenses, fraud and financial crimes, gang-related activities, violation

of court orders, illegal carrying of weapons, and crimes committed under the influence of substances.

Emotional Abuse: Also known as psychological abuse, it refers to a pattern of behavior where a child is intentionally harmed through nonphysical actions that often negatively impact the victim's emotional and behavioral health, including humiliation, intimidation, exploitation, harassment, isolation, rejection, and excessive control (Ness et al., 2023). In this study, emotional abuse was limited to four specific types, namely verbal abuse through swearing insulting and humiliation, threats of physical harm, feeling unloved or unimportant, and family lack of closeness or support, all experienced before the age of 18.

Institutional Strategies: Refers to organized programs and interventions that correctional facilities put in place to support inmates in coping with the psychological consequences of their adverse childhood experience histories (Miller and Najavits, 2012). In this study, institutional strategies were limited to programs available within Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison, including counselling, anger management, stress management, mentorship, spiritual guidance, peer education, trauma classes, and reintegration programs.

Maximum-Security Prison: Refers to facilities with the highest level of security designed for inmates serving lengthy sentences, those exhibiting violent behavior, or those posing a risk of escape from minimum and medium security prisons (United Nations Office on Drugs and Crime, 2006). In this study, this was limited to Langata

Women's Maximum Security Prison and Kamiti Maximum Security Prison, both located within Nairobi City County, Kenya.

Physical Abuse: Refers to all intentional aggressive or violent actions towards children that often occur in the context of close trusting relationships such as between parents and children and results in physical bodily harm, including hitting, striking, biting, choking, burning, shaking, and assault (Peng et al., 2022). In this study, physical abuse was limited to three specific types, namely pushing grabbing or slapping, hitting causing marks or injuries, and witnessing domestic violence within the household, all experienced before the age of 18.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

This chapter provides the context to the study by outlining the background to the study, problem statement, purpose of the study, research objectives, and research questions. Specifically, the chapter situates the study within the broader discourse on the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. According to Felitti et al. (1998), adverse childhood experiences represent a significant public health concern with far-reaching consequences on adult behavioral outcomes, including criminal behavior. The chapter further discusses the significance, assumptions, scope, limitations, and delimitations of the study and ends with a chapter summary.

Background to the Study

Criminal behavior refers to deliberate acts that violate societal norms codified into criminal law, encompassing actions that breach legal codes and result in punishable offenses upon conviction (Tiwari, 2020). The term crime derives from the Latin crimen, signifying acts that challenge or disregard socially acceptable behavior patterns (Bartol and Bartol, 2014). Criminal behavior encompasses a wide spectrum of offenses, from serious crimes like murder to minor violations such as drug possession and theft, all characterized by conscious intent to deviate from accepted behavior without lawful

justification (Coulacoglou and Saklofske, 2018). Adverse Childhood Experiences (ACEs) represent significant psychological stressors encountered before age 18, including various forms of abuse, neglect, and household dysfunction that fundamentally threaten a child's wellbeing (World Health Organization, 2019). The impact of ACEs extends beyond childhood, influencing adult behavior patterns, mental health outcomes, and the likelihood of engaging in criminal activity (Mitkovic et al., 2017). Children exposed to ACEs often develop maladaptive coping mechanisms that persist into adulthood, potentially manifesting as criminal behavior patterns (Bobbio et al., 2020).

From a global perspective, studies have consistently demonstrated high prevalence of ACEs among incarcerated populations. In the United States, research shows that 58% of the general population experiences at least one ACE, with 22% experiencing multiple ACEs, significantly increasing their likelihood of criminal involvement (Giano, 2021). However, among prison populations, prevalence rates are substantially higher, with the Centers for Disease Control and Prevention reporting that approximately 97% of inmates have experienced at least one ACE (R Street Institute, 2024). A comprehensive study by Crick et al. (2024) examining inmates in southern state prisons found that ACEs were strongly linked to criminal behavior, victimization, and health issues, with substance use disorders being the most common comorbid condition. In Europe, a study in Wales found that 84.1% of inmates reported experiencing at least one ACE, with nearly half reporting four or more ACEs, representing rates three times higher than the general male population (Ford et al.,

2019). In Japan, research revealed that 76.1% of incarcerated methamphetamine addicts experienced ACEs before age 18, with female inmates reporting significantly more ACEs than male inmates (Takahashi et al., 2022).

Research globally has also established strong links between childhood emotional abuse and subsequent criminal behavior among inmates. These experiences encompass emotional abuse through verbal hostility, humiliation, and psychological intimidation, with studies demonstrating that such experiences significantly disrupt psychological development and impulse regulation among affected individuals (Felitti et al., 1998). Li et al. (2020) established strong correlations between childhood emotional abuse and behavioral problems among adolescents in China, noting that emotionally abused children were significantly more likely to develop deviant peer associations and depressive symptoms that increased their criminal risk trajectories. Zavala and Guadalupe-Diaz (2018) further demonstrated that emotional abuse victimization was strongly predicted by strain related characteristics, suggesting that the psychological burden of emotional abuse creates pathways toward antisocial and criminal behavior.

The relationship between childhood physical abuse and criminal behavior has equally been extensively documented across global studies. Watts and McNulty (2013) demonstrated through the lens of General Strain Theory that early childhood physical maltreatment is a significant predictor of teenage delinquency in both genders, with depressive symptoms mediating the impact of childhood physical abuse on criminal behavior. Peng et al. (2022) further established that childhood physical abuse

significantly impacted behavioral outcomes among Chinese teenagers, with aggression serving as the strongest mediating factor between physical abuse and behavioral difficulties, representing a clear developmental pathway to adult criminal behavior. Martinkevich et al. (2020) noted that up to 20% of children experience physical abuse globally, with many cases going undiagnosed, allowing abuse patterns to persist and influence later behavioral outcomes including criminal conduct among adults. Kovler et al. (2020) further highlighted that physical abuse disproportionately impacts marginalized populations, with socioeconomic vulnerabilities intersecting with child abuse exposure to collectively increase criminogenic risk in adulthood.

Globally, correctional institutions have increasingly recognized the need for trauma-informed institutional strategies to support inmates with adverse childhood experience histories. Miller and Najavits (2012) established that trauma-informed correctional care provides a contextual foundation that strengthens prison settings by increasing pro-social coping skills, creating calm and safe environments, reducing adverse incidents, and improving rehabilitation outcomes for inmates. Coelho et al. (2025) conducted a systematic review analyzing mental health outcomes of trauma-informed intervention programs in prisons and identified seven key interventions, with the Seeking Safety program being the most commonly implemented across incarcerated populations globally. Despite these advances, prisons globally seldom address trauma systematically, with most correctional institutions failing to provide comprehensive trauma-specific interventions that directly address the adverse childhood experiences underlying criminal behavior patterns among their inmate populations (Coelho et al.,

2025). Ford et al. (2019) further recommended that trauma-informed approaches are urgently needed in prisons to support prisoner mental health and wellbeing given the high ACE prevalence among incarcerated populations.

Across Africa, research indicates high prevalence of ACEs among prison populations, with distinct patterns emerging in different countries (Amene et al., 2024). In South Africa, Naidoo et al. (2024) investigated ACEs among female inmates in Durban and found elevated rates of childhood adversities with significant associations between cumulative ACEs and conditions including post-traumatic stress disorder, alcohol use disorder, and substance use disorder, recommending that prison mental health services provide trauma-informed care to improve inmates' mental health outcomes and decrease recidivism. Research in Tanzania found that 71% of adult men experienced emotional abuse and 50% experienced sexual abuse during childhood, with these experiences significantly correlating with later perpetration of intimate partner violence and criminal behavior (Zietz et al., 2020). A multi-country study examining Mozambique, Cote d'Ivoire, Lesotho, Kenya, and Namibia found that 82% of men and 72% of women experienced at least one ACE, with witnessing physical violence being the most common experience across all countries (Amene et al., 2024).

In Kenya, limited research has explored the relationship between ACEs and criminal behavior among inmates, creating a significant knowledge gap (Muriuki, 2017). A study by Miedema et al. (2023) examining ACE patterns among Kenyan youth aged 13 to 24 found that female youth experienced sexual violence, household and community physical violence, and emotional violence, while male youth primarily

faced physical and emotional violence, confirming high ACE prevalence among the Kenyan population. Muriuki's (2017) study at Langata Women's Maximum Security Prison found higher rates of traumatic experiences among female offenders but was limited by its small sample size of 100 participants and exclusive focus on female inmates, leaving a gap in understanding ACE patterns among male inmates. Regarding institutional strategies, Mutia (2025) assessed psychosocial support programs offered to inmates in Nairobi City County prisons and found that while programs existed, resource constraints significantly limited their effectiveness in addressing the underlying trauma histories of inmates. This gap in understanding how ACEs influence criminal behavior and how institutions support affected inmates in the Kenyan context highlights the need for more comprehensive research to inform targeted interventions and policy development (Muriuki, 2017).

Statement of the Problem

There is a significant rise in the number of criminal cases globally with about 1.2 million violent crimes and over seven million property crimes recorded in the United States of America in 2018 (Federal Bureau of Investigation (FBI), 2019). In Kenya, Cowling (2024) noted there was a 30% rise in crime incidents in 2022; offenses against individuals were the most common crimes with approximately 22,500 cases recorded, alongside 14,718 reported thefts, contributing to a total of over 88,000 reported crimes. While people committing crime often have their unique reasons and life situations, studies have shown that certain factors put certain individuals at increased propensity to commit crimes than others. In particular, Jaffee

et al. (2018) have linked childhood maltreatment to incidences of crime in adolescence and adulthood.

According to United Nations Children's Fund (UNICET), (2019), about a quarter of the global adult population underwent some form of physical abuse in childhood with one in every five adult women going through some form of sexual abuse in childhood. This is in agreement with finds of WHO (2018), that in 2017, an estimated 23% of children worldwide experienced physical abuse, 36% experienced emotional abuse, 16% experienced physical neglect, and 12% experienced sexual abuse. According to research by Miedema et al. (2023), the majority of Kenyan teenagers between the ages of 13 and 24 had experienced emotional, physical, and sexual violence in their homes and communities. Like other studies, this study confirmed a high prevalence of ACEs among Kenyans.

While ACEs have been linked to criminal behavior in various global studies, few of these studies have narrowed down on the relationship between ACEs and criminal behavior in the context of Kenya. While the study by Muriuki (2017) examined the association between childhood trauma and the serious criminal behavior, the study was limited to Langata Women's Maximum Prison with a smaller sample size of 100 participants. Additionally, the study was limited to only assessing childhood trauma, one of the many types of ACES, and was conducted in a female only Maximum-Security Prisons. Similar studies conducted on ACEs in Kenya have primarily explored the connection between adverse childhood experiences and other behavioral issues including but not limited to substance use, early pregnancy, mental

illnesses and not criminal behavior. As such, there is limited data on how ACEs influence criminal behavior especially among male adults in Kenya.

Possible shortcomings in the creation of focused treatments that could address the underlying causes of criminal behavior in the Kenyan setting are implied by the knowledge gap generated by the shortage of studies on the association between ACEs and criminal behavior. This study aimed to fill this gap by investigating the prevalence and patterns of ACEs among offenders in selected maximum-security prisons in Nairobi County, Kenya that provided a rationale that could inform policy decisions and contribute to the development of interventions aimed at reducing crime by addressing its underlying causes, particularly among vulnerable populations exposed to high levels of childhood adversity.

Purpose of the Study

The purpose of this study was to find out the relationship between adverse childhood experiences and criminal behavior among inmates within selected Maximum-Security prisons in Nairobi City County, Kenya.

Objectives of the Study

This study was guided by the following objectives:

1. To determine the prevalence and predominant types of adverse childhood experiences among inmates in selected maximum-security prisons in Nairobi City County, Kenya.

2. To establish the relationship between childhood emotional abuse and criminal behaviour among inmates in selected maximum-security prisons in Nairobi City County, Kenya.
3. To examine the relationship between childhood physical abuse and criminal behaviour among inmates in selected maximum-security prisons in Nairobi City County, Kenya.
4. To evaluate institutional strategies used to support inmates in coping with adverse childhood experiences in selected maximum-security prisons in Nairobi City County, Kenya.

Research Questions

This study sought to answer the following questions:

1. What is the prevalence and predominant types of adverse childhood experiences among inmates in selected maximum-security prisons in Nairobi City County, Kenya?
2. What is the relationship between childhood emotional abuse and criminal behaviour among inmates in selected maximum-security prisons in Nairobi City County, Kenya?
3. How does childhood physical abuse relate to criminal behaviour among inmates in selected maximum-security prisons in Nairobi City County, Kenya?
4. What institutional strategies are used to support inmates in coping with adverse childhood experiences in selected maximum-security prisons in Nairobi City County, Kenya?

Assumptions of the Study

This study was premised on the following assumptions:

1. There was a high prevalence of adverse childhood experiences among inmates in selected maximum-security prisons within Nairobi City County, Kenya.
2. Childhood emotional abuse was a significant predictor of engaging in specific criminal behaviour among inmates in selected maximum-security prisons within Nairobi City County, Kenya.
3. Physical abuse during childhood was a significant predictor of engaging in specific criminal behaviour among inmates in selected maximum-security prisons within Nairobi City County, Kenya.
4. Institutional strategies available to support inmates in coping with adverse childhood experiences within selected maximum-security prisons in Nairobi City County, Kenya were limited and inadequate in addressing the underlying trauma histories of inmates.
5. Inmates who experienced adverse childhood experiences were more likely to exhibit maladaptive behavioral patterns in adulthood compared to those who did not experience such adversities during childhood.

Justification of the Study

With crime universally known to cause emotional, financial, and physical harm, there are concerted global efforts to reduce incidences of crime to the lowest level possible in every population (Tiwari, 2020). While policing and rehabilitation of those

found culpable has been the primary way of ensuring this is achieved, understanding the root causes of criminal behaviour can play an integral role in crime prevention strategy that would contribute to the goal of crime reduction (Bobbio et al., 2020). This study was justified first and foremost by its potential benefit to inmates themselves, as it provided an avenue for identifying the specific link between particular childhood experiences and criminal behaviour in later life that served as a source of insights into the underlying causes of crime in the Kenyan prison context. Research by Jaffee et al. (2018) established that childhood maltreatment predicts poor economic and educational outcomes in adulthood, suggesting that early intervention addressing ACEs could disrupt pathways to criminal behaviour, making it necessary to first understand the nature and prevalence of such experiences among inmates.

Secondly, this study was justified by the need to generate evidence that informs the development of targeted institutional strategies for supporting inmates who experienced adverse childhood experiences. Despite the established link between ACEs and criminal behaviour globally, there remains a critical shortage of studies that have examined this relationship within the Kenyan prison context, particularly among both male and female maximum-security inmates (Muriuki, 2017). Existing studies conducted in Kenya have primarily explored the connection between adverse childhood experiences and other behavioral issues including substance use, early pregnancy, and mental illnesses, without specifically focusing on criminal behavior among adult inmates (Miedema et al., 2023). This study therefore addressed a critical research gap by generating evidence that correctional facilities in Kenya could use to develop more

targeted rehabilitation programs that address the specific trauma histories of their inmate populations.

Thirdly, this study was justified by the inadequacy of existing institutional strategies in addressing the trauma-related needs of inmates in Kenyan prisons. Mutia (2025) established that while psychosocial support programs exist within prisons in Nairobi City County, resource constraints and lack of trauma-informed approaches significantly limit their effectiveness in supporting inmates with adverse childhood experience histories. Similarly, Graf et al. (2021) demonstrated through a comprehensive analysis that higher ACE scores were linked to a higher likelihood of encountering the criminal justice system, underscoring the urgent need for evidence-based institutional strategies that specifically address ACEs among incarcerated populations. By evaluating the institutional strategies currently available in selected maximum-security prisons, this study provided the evidence base necessary for reforming correctional mental health services to better address the root causes of criminal behaviour and improve rehabilitation outcomes in Kenya.

Significance of the Study

The findings of this study primarily benefit inmates currently serving sentences in maximum-security prisons in Kenya and beyond through enhanced rehabilitation and correction programs. With the study identifying the specific adverse childhood experiences that most individuals currently serving prison terms experienced in their past, specific interventions tailored to the needs of offenders can be incorporated as part of their rehabilitation measures that take into account their childhood experiences.

These interventions include trauma-informed counselling, cognitive behavioural therapy, and specialized rehabilitation programs that address the root causes of criminal behaviour. Addressing these underlying issues would improve offenders' chances of successful reintegration into society, benefiting both the individuals and their families in the long run (Bobbio et al., 2020).

Secondly, findings of this study could benefit mental health professionals and other professionals working within the prison setting by providing crucial data on the adverse childhood experiences affecting offenders that will enable them to develop more targeted treatment plans that produce effective results with individuals serving their terms. Understanding the specific types of adverse childhood experiences most prevalent among inmates enables prison counsellors, probation officers, and rehabilitation specialists to design interventions that directly address the psychological roots of criminal behaviour rather than relying on generic approaches. This supports the implementation of the Mental Health Policy 2015 to 2030, which calls for integrated mental health services in all sectors, including correctional facilities, making the findings of this study directly applicable to improving professional practice within Kenya's prison system.

Thirdly, the study could benefit policymakers in the criminal justice system by providing evidence-based insights on the link between adverse childhood experiences and criminal behaviour. This aligns with the Kenya Vision 2030 and the National Crime Prevention Strategy, which emphasize evidence-based approaches to crime reduction. The findings will guide the development of effective crime prevention strategies that

address adverse childhood experiences by initiating policies focused on early intervention and support for at-risk children, thereby ultimately reducing crime rates within communities. In addition, policymakers may use the findings in making informed decisions regarding sentencing as well as rehabilitative interventions that are not purely punitive, in line with the Kenya Prisons Service Strategic Plan 2018 to 2022, which advocates for rehabilitation-focused corrections.

Fourthly, this study will benefit parents and caregivers by providing evidence-based insights on how adverse childhood experiences can impact long-term behavioural outcomes. The findings will guide parenting education programs and child protection initiatives, helping parents understand the importance of creating nurturing environments and preventing childhood trauma during the formative years of child development. This knowledge can inform community-based parenting programs and early intervention strategies as outlined in the National Children Policy 2010 and the Children Act 2022, equipping parents and caregivers with the awareness needed to protect children from experiences that may predispose them to criminal behaviour in adulthood (Jaffee et al., 2018).

Fifthly, this study could benefit society by indirectly leading to safer communities through lower crime rates as a ripple effect of successful rehabilitation of offenders. The research will contribute to community safety initiatives outlined in the National Police Service Strategic Plan 2018 to 2022 by addressing the root causes of criminal behaviour rather than focusing exclusively on punitive measures. When correctional institutions are equipped with evidence on the relationship between

adverse childhood experiences and criminal behaviour, they are better positioned to implement rehabilitation programs that genuinely reduce recidivism, thereby contributing to broader societal safety and wellbeing (Graf et al., 2021).

Lastly, the findings of this study will add to the existing body of knowledge on adverse childhood experiences by offering information pertaining to the Kenyan context, which is often missing in existing research. Miedema et al. (2023) noted the scarcity of comprehensive adverse childhood experience studies in Kenya, particularly among adult criminal populations in maximum-security prisons. Future scholars would have a point of reference on the subject when conducting similar research in East Africa and other developing contexts, potentially leading to new insights and interventions that will benefit society as a whole. This aligns with the Kenya National Research Agenda priorities on social transformation and crime prevention.

Scope of the Study

This study sought to examine the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons within Nairobi City County, Kenya. Specifically, the study aimed to determine the prevalence and predominant types of adverse childhood experiences among inmates, establish the relationship between childhood emotional abuse and criminal behaviour, examine the relationship between childhood physical abuse and criminal behaviour, and evaluate institutional strategies used to support inmates in coping with adverse childhood experiences in selected maximum-security prisons within Nairobi City County, Kenya.

The study was conducted at Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison, both located within Nairobi City County, Kenya. A study by Musili et al. (2016) indicated that Langata Women's Maximum Security Prison had a population of about 700 female offenders, while Kamiti Maximum Security Prison had about 3,500 male offenders, giving a total target population of 4,200 inmates. Using Krejcie and Morgan's (1970) sampling table, a sample size of 351 inmates was selected, comprising 60 female inmates from Langata Women's Maximum Security Prison and 291 male inmates from Kamiti Maximum Security Prison. In addition to inmates, the study included 30 key informants comprising 10 prison counsellors, 10 prison wardens, and 10 probation officers who were directly involved in inmate rehabilitation and support programs within the two selected prisons.

These prisons provided a unique population that consisted of individuals from different genders, varying ages, different educational backgrounds, and different socioeconomic statuses. By focusing on these prisons, the study was able to identify gender-specific characteristics that related to adverse childhood experiences and their influence on criminal behaviour. The study employed a correlational research design with a mixed-methods approach, integrating both quantitative and qualitative data collection methods. Quantitative data were collected through structured questionnaires administered to inmates, while qualitative data were gathered through semi-structured interview guides administered to key informants. Data collection was conducted between January 2024 and March 2024, with data analysis completed by

June 2024 using the Statistical Package for Social Sciences version 28 for quantitative data and thematic analysis for qualitative data.

Limitations of the Study

This study encountered several setbacks that were beyond the control of the researcher and negatively impacted the generalizability of the findings. Firstly, since the study depended on self-reported data from participants, recall bias was encountered where some participants were unable to accurately remember certain adverse childhood experiences from their past. Some inmates indicated during data collection that they found it difficult to recall the exact frequency and nature of specific childhood experiences, particularly those that occurred during early childhood. To mitigate this limitation, the researcher used a structured and standardized questionnaire that prompted participants to recall specific experiences through clearly worded items, minimizing the risk of inaccurate recall as much as possible within the constraints of a retrospective study design (Creswell and Creswell, 2018).

Secondly, the study encountered the limitation of social desirability bias during data collection, where some participants provided responses that appeared to attribute their criminal behaviour entirely to their childhood experiences rather than providing balanced accounts of their life circumstances. This tendency was observed particularly among inmates who appeared eager to present their criminal involvement as a direct consequence of childhood victimization, which may have impacted the accuracy and reliability of some of the data collected. To address this limitation, participants were assured of the confidentiality of their responses and were encouraged to provide honest

answers without fear of judgment or negative consequences, with the use of anonymous questionnaires further reducing the likelihood of socially desirable responses (Kumar, 2019).

Thirdly, the voluntary nature of participation in this study resulted in selection bias during data collection, where inmates with the most severe adverse childhood experience histories demonstrated either heightened willingness or notable reluctance to participate. During data collection, it was observed that some inmates were hesitant to participate when they learned the study involved recalling childhood experiences, while others were willing to share their experiences openly and at length. This variation in willingness to participate resulted in the underrepresentation of inmates with the most severe adverse childhood experience histories among those who declined to participate, potentially affecting the comprehensiveness of the findings reported (Taherdoost, 2016).

Fourthly, the study encountered the challenge of emotional distress among some participants during data collection, as revisiting childhood experiences triggered visible emotional reactions among certain inmates. Some participants became visibly distressed during the questionnaire administration process and chose to leave certain items blank or provided incomplete responses to avoid engaging with particularly painful memories. To address this challenge, the researcher made counselling services available through prison mental health professionals for participants who experienced emotional distress during or after participation, and participants were reminded

throughout the data collection process of their right to withdraw from the study at any point without penalty (Creswell and Creswell, 2018).

Lastly, the findings of this study were limited in their generalizability to adult offenders in other counties or correctional facilities outside Nairobi City County. The study was confined to Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison, whose unique demographic, socioeconomic, and institutional characteristics differed from those of other maximum-security prisons in counties such as Mombasa, Kisumu, and Nakuru. As a result, the findings on the relationship between adverse childhood experiences and criminal behaviour among adult inmates in these two facilities cannot be directly applied to the broader Kenyan prison population without further verification through studies conducted in other counties and correctional settings.

Delimitation of the Study

This study was delimited to examining the relationship between adverse childhood experiences (ACEs) and criminal behaviour among inmates in selected maximum-security prisons within Nairobi City County, Kenya. While previous studies had linked criminal behaviour to factors including socioeconomic conditions, peer pressure, substance abuse, among others, this study specifically focused on ACEs as a contributing factor to criminal behaviour; these other factors were outside the scope of this study. Secondly, although the study explored the prevalence of various ACEs as captured in the ACE-Q, the study specifically explored the influence of emotional abuse and physical abuse on criminal behaviour.

The study specifically focused on inmates currently incarcerated at Langata Maximum Security Prison and Kamiti Maximum Security Prison. As such, it did not include other prisons categorized within the study area or non-incarcerated individuals within the selected Maximum-Security Prisons, including prison staff, individuals involved in community rehabilitation programs, or even relatives or friends of inmates who may have been at the study sites during the data collection period.

Chapter Summary

This chapter has provided the background that set the context for the area of study. Highlights on prevalence of ACEs within the prison population were reviewed from global, African, East African and Kenyan contexts with specific gaps that necessitated this study. Key potential benefits that included informing policy and possible interventions to address the root causes of crime were highlighted, with the various stakeholders likely to benefit and how they would specifically benefit described in detail. The chapter has established the foundational basis upon which this entire study was based. The next chapter entails a review of relevant literature on ACEs guided by the study objectives.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter provides a comprehensive review of related literature on ACEs and criminal behaviour. The chapter begins with a detailed empirical review of studies guided by each of the study objectives, progressing from global perspectives to regional contexts, and concluding with local Kenyan perspectives. This is followed by an in-depth discussion of relevant theoretical frameworks, where psychoanalytic theory and social learning theory are examined to provide the theoretical foundation for understanding how adverse childhood experiences influence adult criminal behavior patterns. The chapter concludes with an illustration of the study's conceptual framework, which visually captures the hypothesized relationships between the study variables.

General Literature Section

Adverse childhood experiences represent one of the most significant public health challenges globally, with profound and lasting consequences on individual development, behavioral outcomes, and social functioning throughout the life course. Felitti et al. (1998) conducted the foundational ACE study involving over 9,508 adults and established that childhood experiences of psychological, physical, and sexual abuse, witnessing domestic violence, and living with household members who were substance abusers, mentally ill, or incarcerated were strongly associated with a wide

range of negative adult outcomes including criminal behavior. The study demonstrated a clear dose-response relationship between the cumulative number of ACEs experienced and the severity of negative outcomes in adulthood, establishing that the greater the exposure to adverse childhood experiences, the more severe the behavioral, health, and social consequences in later life. This foundational work set the stage for decades of subsequent research that consistently confirmed and expanded these initial findings across diverse populations and contexts worldwide (Graf et al., 2021).

The global prevalence of adverse childhood experiences is alarmingly high, with studies consistently demonstrating that a significant proportion of the world's population has been exposed to at least one form of childhood adversity before the age of eighteen. Understanding this prevalence is fundamental to the first objective of the present study, which sought to determine the prevalence and predominant types of adverse childhood experiences among inmates in selected maximum-security prisons in Nairobi City County, Kenya. Kessler et al. (2010) conducted one of the largest epidemiological surveys exploring ACE prevalence among 51,945 adults across 21 countries participating in the World Health Organization World Mental Health Surveys, finding that 38.8% of the sample had experienced at least one ACE before the age of eighteen. Basto-Pereira et al. (2022) further confirmed that adverse childhood experiences were highly interrelated across ten countries on five continents, with children experiencing one type of adversity being substantially more likely to simultaneously experience other forms of maltreatment, compounding psychological harm and increasing vulnerability to criminal behavior in adulthood.

The cumulative nature of adverse childhood experiences means that individuals who experience multiple forms of childhood adversity face significantly amplified risks of negative outcomes in adulthood compared to those who experience only a single type of adversity. Felitti et al. (1998) demonstrated that among adults who reported four or more ACEs, the risk of negative outcomes including criminal behavior was exponentially higher than among those who reported fewer ACEs, establishing the cumulative dose-response pattern that has since been replicated across numerous global studies. Baglivio et al. (2014) further established that among 64,329 juvenile delinquents in Florida, nearly 97% reported at least one ACE, with the most prevalent experiences being witnessing domestic violence, parental separation or divorce, and living with an incarcerated household member. This cumulative effect underscores the importance of assessing not merely the presence of individual ACEs but the total burden of childhood adversity and its predominant types when examining the relationship between adverse childhood experiences and criminal behavior among incarcerated populations.

The mechanisms through which adverse childhood experiences contribute to criminal behavior involve complex neurobiological, psychological, and social pathways that operate across the developmental life course. Urban Institute (2025) explained that trauma exposure resulting from adverse childhood experiences leads to an overstimulated amygdala, an underdeveloped hippocampus, and a subsequently underdeveloped prefrontal cortex, which directly influences decision-making, impulse control, and emotional regulation in ways that significantly increase vulnerability to

criminal behavior. The prefrontal cortex, which is responsible for higher-order executive functions including decision-making and impulse control, continues to develop until approximately age twenty-five, making it particularly vulnerable to the damaging effects of chronic stress and trauma during childhood and adolescence (Davis, 2018). When adverse childhood experiences disrupt the normal development of these critical brain structures during sensitive periods of neurological development, the resulting deficits in emotional regulation and impulse control create enduring neurological pathways that significantly increase the risk of antisocial and criminal behavioral responses throughout adulthood.

Emotional abuse during childhood represents one of the most pervasive and psychologically damaging forms of adverse childhood experiences, with significant implications for subsequent criminal behavior among affected individuals. This is directly relevant to the second objective of the present study, which sought to establish the relationship between childhood emotional abuse and criminal behaviour among inmates in selected maximum-security prisons in Nairobi City County, Kenya. Emotional abuse encompasses verbal hostility, humiliation, psychological intimidation, rejection, and isolation, all of which inflict profound and enduring psychological harm on developing children by disrupting healthy attachment, self-concept formation, and emotional regulation capacities (Felitti et al., 1998). Cui and Liu (2018) established through a meta-analysis of 42 studies involving 98,749 children that emotional abuse demonstrated the strongest correlation with internalizing behavioral problems compared to other forms of maltreatment, underscoring its significance as a particularly

harmful form of childhood adversity with serious implications for long-term behavioral outcomes including criminal conduct in adulthood.

The relationship between childhood emotional abuse and criminal behavior operates through multiple psychological and social pathways that have been extensively documented across global research studies. Basto-Pereira et al. (2022) established that among males across ten countries on five continents, emotional violence during childhood was significantly associated with all criminal outcomes examined, demonstrating the pervasive influence of emotional abuse on criminal behavioral trajectories across diverse cultural and geographical contexts. Li et al. (2020) further established strong correlations between childhood emotional abuse and adolescent depression, with deviant peer affiliation moderating this association, suggesting that emotionally abused children who develop depression are significantly more likely to affiliate with antisocial peers, creating compounding pathways toward criminal behavior. The psychological burden created by emotional abuse, including chronic shame, unresolved anger, and poor self-regulation, creates enduring maladaptive behavioral patterns that significantly increase vulnerability to criminal conduct throughout adulthood among individuals with histories of childhood emotional victimization (Zavala and Guadalupe-Diaz, 2018).

Physical abuse during childhood constitutes another major and well-documented form of adverse childhood experience with strong and consistently demonstrated links to criminal behavior across global populations. This is directly relevant to the third objective of the present study, which sought to examine the

relationship between childhood physical abuse and criminal behaviour among inmates in selected maximum-security prisons in Nairobi City County, Kenya. Physical abuse, which encompasses hitting, beating, burning, choking, and other forms of intentional physical harm inflicted on children by caregivers or adults, is particularly damaging because it occurs within relationships that are supposed to provide safety and nurturing, fundamentally disrupting the child's sense of security and trust in others (American Psychological Association, 2018). Watts and McNulty (2013) demonstrated through the lens of General Strain Theory that early childhood physical maltreatment is a significant predictor of teenage delinquency in both genders, with depressive symptoms mediating the impact of childhood physical abuse on subsequent criminal behavioral trajectories throughout adolescence and adulthood.

Research consistently demonstrates that children who experience physical abuse develop heightened aggression, defiance, and poor impulse control, which are among the strongest predictors of later criminal conduct. Peng et al. (2022) established among 16,111 Chinese teenagers that childhood physical abuse significantly impacted behavioral outcomes, with aggression serving as the strongest mediating factor between physical abuse and behavioral difficulties, representing a clear developmental pathway from childhood physical victimization to adult criminal behavior through learned aggressive response patterns. Martinkevich et al. (2020) further established that up to 20% of children globally experience physical abuse, with the vast majority of cases going undiagnosed and unaddressed by protective systems, allowing abuse patterns to persist and influence later behavioral outcomes including criminal conduct. Children

exposed to physical abuse often internalize violence as a legitimate means of resolving conflict, creating learned behavioral patterns that manifest as criminal conduct in adulthood when the individual is confronted with stressful or threatening situations (Basto-Pereira et al., 2022).

Institutional strategies used to support inmates in coping with adverse childhood experiences represent the fourth and final area of focus of the present study, which sought to evaluate the institutional strategies available to support inmates in selected maximum-security prisons in Nairobi City County, Kenya. Globally, correctional institutions have increasingly recognized that the majority of their inmate populations carry significant adverse childhood experience histories that must be addressed through specialized trauma-informed institutional strategies if rehabilitation is to be effective (Miller and Najavits, 2012). Miller and Najavits (2012) established that trauma-informed correctional care provides a contextual foundation that strengthens prison settings by increasing pro-social coping skills, creating calm and safe institutional environments, reducing adverse incidents among inmates, and improving overall rehabilitation outcomes for incarcerated individuals with significant trauma histories. Coelho et al. (2025) confirmed through a systematic review that trauma-informed intervention programs in prisons consistently produced significant improvements in traumatic symptoms and overall mental wellbeing among incarcerated individuals across multiple international correctional contexts.

The critical importance of understanding the relationship between adverse childhood experiences and criminal behavior within specific cultural and regional

contexts cannot be overstated, as the nature, prevalence, and impact of ACEs vary significantly across different social, economic, and cultural environments. Research in Africa has demonstrated that the prevalence of adverse childhood experiences among prison populations is particularly high, with Amene et al. (2024) finding that 82% of men and 72% of women in a multi-country African study experienced at least one ACE, with witnessing physical violence being the most common experience across all countries examined. Regarding institutional support, Naidoo et al. (2024) recommended that prison mental health services in African contexts must provide trauma-informed and trauma-focused care to improve inmates' mental health outcomes and decrease recidivism, noting that existing institutional strategies remain largely inadequate in addressing the complex trauma histories of incarcerated populations. In Kenya specifically, Muriuki (2017) confirmed significant childhood trauma histories among female inmates at Langata Women's Maximum Security Prison while Njuguna (2026) established that trauma exposure was the most powerful predictor of criminal involvement among youth offenders in Nairobi, collectively underscoring the urgent need for the present study.

Empirical Literature as Guided by the Study Objectives

A review of empirical literature informed by the objectives of the study is presented in this section. It examines four main areas aligned with the four study objectives, namely: the prevalence and predominant types of adverse childhood experiences among inmates, the relationship between childhood emotional abuse and criminal behavior, the relationship between childhood physical abuse and criminal

behavior, and institutional strategies used to support inmates in coping with adverse childhood experiences within prison settings. The review synthesizes findings from studies conducted across different geographical locations, progressing from global to regional to local perspectives in line with the funnel approach to literature review.

Prevalence and Predominant Types of Adverse Childhood Experiences among Inmates

A study on the prevalence of ACEs was carried out by Friestad et al. (2014) that examined the correlation between ACEs, suicidal ideation, and drug use among Norwegian female inmates. Using structured interviews with 141 female inmates, the study found that 39% had endured emotional abuse, 36% physical abuse, and 19% sexual abuse as children, while 31% had been neglected emotionally and 33% had been physically neglected, representing 75% of the eligible population. The study also revealed that 34% of participants reported experiencing more than five ACEs while 17% reported no ACEs. After controlling for demographic variables, the research established that attempts at suicide and current drug abuse were both elevated by the cumulative number of adverse childhood experiences, confirming that higher ACE exposure among incarcerated populations was associated with more severe negative behavioral and mental health outcomes throughout adulthood.

In a study conducted in the United States, Crick et al. (2024) investigated the correlation between adverse childhood experiences and co-occurring disorders in a southern state's three rural prisons. Using an Inmate History and Needs interview survey with 166 inmates comprising 59 females and 107 males, the study found high rates of ACEs, mental health issues, and drug use among participants. The research

revealed that substance use disorders were the most common comorbid disorder among individuals with ACEs, and that coming from a rural area was a risk factor for higher exposure to ACEs and drug use, while being a parent served as a protective factor against further criminal involvement. The predominant ACE types identified in the study included emotional abuse, physical abuse, and household substance abuse, consistent with findings from other prison-based studies that confirm the clustering of specific ACE types among incarcerated populations globally (Ford et al., 2019).

Umpunjun et al. (2024) conducted a systematic review and meta-analysis examining the prevalence and predominant types of ACEs among incarcerated males. Analyzing 50 papers covering 48,648 participants primarily from western countries representing 86% of the sample, the study found that sexual abuse was the most frequently studied ACE at 80% but had the lowest prevalence estimates at 12%. The research revealed that emotional neglect at 38%, intimate partner violence at 36%, and parental separation at 36% had the highest prevalence rates but were among the least frequently explored ACE types in research. The study established that the pattern of predominant ACE types among incarcerated males differed significantly from prevalence patterns in general population studies, with neglect and household dysfunction being far more prevalent among inmates than among non-incarcerated adults, highlighting the distinct ACE profiles of prison populations globally.

Takahashi et al. (2022) evaluated the incidence of ACEs and their predominant types among incarcerated methamphetamine addicts in Japan. Of the 636 inmates surveyed, 418 were male and 218 were female. The results showed that 76.1% of the

inmates had experienced a traumatic life event before the age of eighteen, with female inmates reporting far more ACEs than male inmates. The most commonly identified ACE types included psychological abuse and parental death or divorce, establishing clear patterns in the predominant types of adverse childhood experiences experienced by this incarcerated population. After adjusting for potential confounding factors, the study found that ACE scores substantially raised the risk of both suicidal thoughts and non-suicidal self-injury, demonstrating the pervasive mental health consequences of prevalent adverse childhood experience types among incarcerated populations across different cultural contexts.

Ford et al. (2020) investigated the prevalence and impact of adverse childhood experiences among 468 male inmates in Wales. A total of 84.2% of participants had encountered at least one adverse childhood experience, with 45.5% reporting four or more ACEs. Inmates who had four or more adverse childhood experiences were more than ten times more likely to record self-harm throughout their lives, four times more likely to have a lifetime diagnosis of a mental illness, and four times more likely to make a suicide attempt. The study established that the most prevalent ACE types among the incarcerated male population in Wales included emotional abuse, physical abuse, and witnessing domestic violence, with these three ACE types being most consistently associated with poor mental health outcomes among participants. The findings underscored the critical importance of identifying not merely ACE prevalence but also the specific predominant types of ACEs experienced by incarcerated populations.

From a regional perspective, Naidoo et al. (2024) investigated the prevalence and predominant types of childhood adversities among 126 female inmates in Durban, South Africa. Using the WHO ACE-IQ questionnaire, the study found elevated rates of individual childhood adversities among participants, with emotional abuse, physical abuse, and witnessing domestic violence being the most commonly reported ACE types. The study established significant associations between cumulative childhood adversities and various conditions including post-traumatic stress disorder, alcohol use disorder, substance use disorder, and HIV, with the cumulative burden of multiple ACE types being more strongly predictive of negative outcomes than any single ACE type in isolation. The study recommended that prison mental health services must provide trauma-informed care informed by an understanding of the specific ACE types most prevalent among their inmate populations to improve mental health outcomes and decrease recidivism.

Locally in Kenya, Muriuki (2017) conducted a study at Langata Women's Maximum Security Prison examining the prevalence and types of childhood trauma among 100 female offenders. The study found that physical abuse and emotional abuse were the most commonly reported childhood adversities among the participants, confirming that specific ACE types were more prevalent than others within the Kenyan incarcerated female population. Njuguna (2026) further established in a study among youth offenders in Nairobi that 62% of juvenile offenders had experienced at least one traumatic event before the age of eighteen, with physical abuse, community violence exposure, and parental incarceration being the predominant ACE types reported among

those with higher levels of criminal involvement. These Kenyan studies collectively confirm high ACE prevalence and identify specific predominant ACE types among the local criminal justice involved population, providing the contextual foundation for the present study.

Relationship Between Emotional Abuse and Criminal Behavior

Zavala and Guadalupe-Diaz (2018) examined emotional abuse victimization and perpetration by testing the theories of self-control, social learning, and strain using a sample of 434 college students from two public institutions. The research established that characteristics derived from general strain theory were superior predictors of emotional abuse victimization and perpetration compared to self-control or social learning theories, demonstrating that emotional abuse creates significant psychological strain that increases the likelihood of antisocial and criminal behavioral responses. The findings established that when the strain created by emotional abuse victimization is not effectively managed through prosocial coping strategies, affected individuals are significantly more likely to respond with deviant and criminal behaviors as a means of alleviating the psychological burden created by their emotional abuse histories. The research emphasized exploring theoretical propositions regarding emotional abuse as crucial for informing preventive interventions addressing psychological pathways to criminal behavior.

Cui and Liu (2018) conducted a meta-analysis to investigate the connection between childhood behavioral problems and three forms of child maltreatment including neglect, emotional abuse, and physical abuse. In its analysis of 42 studies

involving 98,749 children, the researchers discovered small to moderate effect sizes in the associations between externalizing and internalizing behaviors and all three forms of maltreatment, with emotional abuse demonstrating the strongest correlation with internalizing behavioral problems. The study established that the relationship between emotional abuse and internalizing behavioral problems was stronger and more consistent than the equivalent relationship for physical abuse or neglect, underscoring emotional abuse as a particularly influential form of childhood maltreatment in shaping long-term behavioral trajectories. These findings are particularly relevant to understanding how emotional abuse among inmates in maximum-security prisons may have contributed to the behavioral patterns that ultimately led to their criminal involvement and incarceration.

Li et al. (2020) examined the relationship between childhood emotional abuse and teenage depression using questionnaire data from 961 Chinese teenagers. The study revealed a strong correlation between childhood emotional abuse and adolescent depression even after accounting for other forms of childhood abuse, with the study demonstrating that deviant peer affiliation moderated this association. Gender moderated the relationship between childhood emotional abuse and deviant peer affiliation more significantly for girls than for boys, suggesting that emotionally abused girls were particularly vulnerable to antisocial peer influences that increased their risk of criminal behavioral involvement. The research further determined that interventions aimed at reducing childhood emotional abuse could specifically protect girls against the dangers of deviant peer association and depression, both of which are established risk

factors for subsequent criminal behavior among adolescents and young adults who go on to become incarcerated as adults.

Wolff and Shi (2012) examined the relationship between childhood trauma including emotional abuse and adult behavioral health problems among approximately 4,000 incarcerated males. The study found that rates of childhood emotional trauma were higher than adult emotional trauma among the incarcerated sample, with emotional abuse being strongly associated with a wide range of behavioral problems including aggression, interpersonal difficulties, and substance use. Maia et al. (2025) further established among 283 incarcerated men in Portugal that adverse childhood experiences including emotional abuse were significantly linked to emotional regulation difficulties, with higher ACE scores being associated with greater difficulties in managing emotional responses in ways that were relevant to criminal conduct within correctional settings. These findings collectively demonstrate that childhood emotional abuse creates enduring emotional regulation deficits that manifest as criminal behavioral patterns among incarcerated adult populations across diverse international contexts.

From a regional perspective, Naidoo et al. (2024) established among female inmates in South Africa that emotional abuse during childhood was among the most prevalent adverse childhood experiences reported, with significant associations found between emotional victimization histories and subsequent violent offending patterns among the incarcerated female participants. The study demonstrated that women's pathways to violent criminal offending were strongly associated with prior emotional

victimization during childhood, supporting the proposition that emotional abuse disrupts healthy psychological development and creates risk pathways toward criminal behavior particularly among female offenders. Locally in Kenya, Njuguna (2026) established that trauma exposure including emotional victimization was the most powerful predictor of youth crime involvement in Nairobi, with trauma exerting both direct and indirect effects on criminal behavior through its association with lowered self-control and increased affiliation with delinquent peers among youth aged 18 to 30 years in the city's informal settlements.

Relationship Between Physical Abuse and Criminal Behavior

Watts and McNulty (2013) examined the correlation between childhood maltreatment and criminal behavior through the lens of General Strain Theory using data from the National Longitudinal Study of Adolescent Health. The analysis revealed that early childhood physical and sexual maltreatment were significant predictors of teenage delinquency in both genders, with depressive symptoms mediating the impact of childhood physical abuse on criminal behavior in both males and females. For females, the impact of sexual abuse was mostly mediated by maternal proximity, but for males the effect of physical abuse was more pronounced and endured despite adjustments for multiple characteristics including limited self-control and school attachment. This established a clear theoretical pathway through which physical abuse influences criminal trajectories by creating depressive states and reducing protective factors that normally buffer individuals against antisocial behavioral responses throughout adolescence and adulthood.

Martinkevich et al. (2020) conducted a review examining physical child abuse during health and socioeconomic crises. The study found that while up to 20% of children experience physical abuse globally, only 0.1% are diagnosed, with healthcare professionals issuing less than 20% of all reports. The research revealed that during Denmark's COVID-19 lockdown, reports of suspected non-accidental injury decreased by 42% despite increased risk factors, demonstrating that physical abuse is significantly underreported particularly during crisis periods. This underdiagnosis of physical abuse suggests that many children experiencing physical violence remain unidentified by protective systems, allowing abuse patterns to persist unaddressed and influence later behavioral outcomes including criminal conduct in adulthood. The study emphasized that the widespread underdiagnosis of physical abuse means that its long-term behavioral consequences, including criminal behavior in adulthood, are likely more pervasive than official statistics suggest across global populations.

Peng et al. (2022) directly addressed the behavioral consequences of physical abuse by examining its correlation with behavioral outcomes in Chinese teenagers, exploring the mediating effect of aggressiveness. The research used stratified cluster sampling of 16,111 students from grades 7 to 12 across five Chinese provinces, revealing that 16.0% of teenagers exhibited problematic behaviors, with moderate and severe childhood physical abuse impacting 26.9% and 4.4% of individuals respectively. The research demonstrated that hostility partly mediated the association between childhood physical abuse and behavioral difficulties, with aggression showing the strongest association with all behavioral outcomes, suggesting a developmental

pathway from childhood physical victimization to adult criminal behavior through learned aggressive response patterns. This finding is particularly relevant to the present study as aggression and hostility represent the behavioral patterns most commonly associated with violent criminal offending among maximum-security prison inmates.

Kovler et al. (2020) examined the incidence of physical child abuse injuries at a Level I pediatric trauma center in the United States during the COVID-19 pandemic. A retrospective analysis following Maryland's statewide shutdown of childcare facilities revealed a large rise in physical child abuse injuries during the COVID-19 period, comprising 13% of total trauma patients compared to 4% in 2019 and 3% in 2018. The study found that the majority of affected patients were from marginalized Black communities at 75% and had public health insurance at 75%, with all injuries resulting from blunt trauma leading to diverse ailments including scalp and face contusions at 63%, skull fractures at 50%, and cerebral hemorrhage at 38%.

From a regional perspective, Naidoo et al. (2024) established among female inmates in Durban, South Africa that childhood physical victimization was strongly associated with subsequent violent offending, supporting Widom's cycle of violence theory which posits that violent victimization inflicted upon children by parents or caregivers increases the risk of later violent behavior and criminal involvement. The study found that women's pathways to violent criminal offending were significantly associated with prior physical victimization during childhood, with those reporting more severe physical abuse histories being more likely to be incarcerated for violent offenses. In a study conducted in Kenya, Njuguna (2026) established that among youth

offenders in Nairobi's informal settlements, physical abuse during childhood was among the most significant predictors of criminal involvement, with youth reporting high levels of physical abuse being significantly more likely to engage in property crime, violent offenses, and gang-related activities as young adults.

Locally in Kenya, the Ministry of Labour and Social Protection (2019) conducted a national Violence Against Children survey and reported that 62.6% of respondents had experienced multiple incidents of abuse before the age of eighteen, with physical abuse being one of the most commonly experienced forms of childhood maltreatment. Muriuki (2017) confirmed at the local prison level that physical abuse during childhood was among the most prevalent adverse childhood experiences reported among female inmates at Langata Women's Maximum Security Prison, with those reporting physical abuse histories demonstrating distinct patterns of behavioral dysregulation and criminal conduct compared to inmates without such histories. These Kenyan studies collectively underscore that childhood physical abuse represents a significant criminogenic risk factor within the local context, reinforcing the need for prison-based interventions that specifically address the physical abuse histories of inmates in Kenya's maximum-security correctional facilities.

Institutional Strategies Used to Support Inmates in Coping with Adverse Childhood Experiences within Prison Settings

Miller and Najavits (2012) established that trauma-informed correctional care provides a contextual foundation that strengthens prison settings by increasing pro-social coping skills, creating calm and safe prison environments, reducing adverse

incidents, and aiding staff morale, all of which contribute to better offender rehabilitation outcomes. The study argued that prison represents a valuable opportunity for addressing trauma impact, as incarceration provides a period apart from outside influences that can distract or derail inmates from a recovery focus, making it an ideal context for implementing structured trauma-informed institutional strategies. The research further established that trauma-specific institutional interventions have been found to be more powerful than general trauma-informed approaches alone, with the most effective correctional settings being those that make both trauma-informed principles and specific clinical trauma interventions available to incarcerated individuals with adverse childhood experience histories throughout their sentences.

Coelho et al. (2025) conducted a systematic review analyzing the mental health outcomes of trauma-informed intervention programs in prisons, identifying thirteen empirical studies featuring seven interventions, with the Seeking Safety program being the most commonly implemented across correctional settings globally. The review established that trauma-informed intervention programs in correctional settings produced significant positive mental health outcomes for incarcerated individuals, including reductions in traumatic symptoms and improvements in overall mental wellbeing among participants. The study further found that these institutionally-delivered interventions, when strategically focused on reducing recidivism and improving community safety, proved more effective than conventional incarceration methods in addressing the underlying trauma histories of inmates. However, the review also highlighted that most correctional institutions globally continue to fail in

systematically addressing trauma within their institutional programs, with prisons seldom providing comprehensive trauma-specific institutional support that directly addresses adverse childhood experience histories underlying criminal behavioral patterns.

Gaber et al. (2025) conducted a scoping review on the implementation of trauma-informed care in correctional facilities and found that its implementation decreased institutional violence, including confrontations between staff and incarcerated individuals, demonstrating the broad institutional benefits of trauma-informed approaches beyond their direct clinical benefits to inmates. The review established that trauma-informed institutional strategies have proven effective in prisons as behavior management tools and as mechanisms for ensuring the safety of both correctional staff and inmates throughout the institutional environment. However, the review also identified significant implementation challenges including inadequate staff training in trauma-informed approaches, insufficient institutional resources, and correctional cultures that remain focused on risk management and containment rather than on rehabilitation and trauma recovery. These findings underscore that without systematic institutional commitment to trauma-informed principles, correctional facilities will continue to struggle to provide effective support to inmates with adverse childhood experience histories.

Hampton-Anderson et al. (2021) investigated adverse childhood experiences and institutional support strategies among African American populations and emphasized the significance of culturally aware preventive interventions that bolster

individual coping mechanisms, strengthen familial ties, and promote community capacity as complementary components of effective institutional support programs. The study found that cultural assets, including spiritual practices and community solidarity, played important roles in fostering resilience among individuals with adverse childhood experience histories, suggesting that effective institutional strategies within correctional settings must be culturally responsive to the specific backgrounds and values of their inmate populations. Kalia and Knauft (2020) further established that emotion management techniques mitigated the effect of adverse childhood experiences on chronic stress, with cognitive reappraisal significantly reducing stress levels among individuals with ACE histories, underscoring the importance of incorporating evidence-based coping strategy training within the institutional support programs offered to inmates in correctional facilities.

From a regional perspective, Naidoo et al. (2024) recommended that prison mental health services in South African correctional facilities should provide trauma-informed and trauma-focused institutional care to improve inmates' mental health outcomes and decrease recidivism, noting that existing mental health services within African prisons were generally inadequate in addressing the complex trauma histories of incarcerated populations. The study highlighted that most African correctional facilities lack the trained personnel, institutional resources, and structured programs necessary to implement effective trauma-informed care that adequately supports inmates with adverse childhood experience histories. Locally in Kenya, Otieno (2018) evaluated the effectiveness of rehabilitation programs for women offenders in Kenyan

prisons and found that only 18.8% of available programs focused on psychological needs, with none addressing substance abuse or parental distress, and that prison staff lacked training in gender-responsive practices, fundamentally undermining the effectiveness of institutional rehabilitation efforts for trauma-exposed inmates.

Locally in Kenya, Mutia (2025) assessed psychosocial support programs offered to inmates in prisons in Nairobi City County and found that while various programs including guidance and counselling, anger management, and mentorship existed within the correctional institutions, resource constraints significantly limited their effectiveness in addressing the underlying trauma histories of inmates. The study established that successful rehabilitation of trauma-exposed inmates requires comprehensive institutional support and ongoing evaluation to ensure that programs are effective in helping inmates reintegrate into society and avoid reoffending. These findings from the Kenyan context collectively reveal that while some institutional strategies exist within Kenya's correctional facilities to support inmates in coping with their adverse childhood experience histories, these strategies remain inadequately resourced, insufficiently trauma-informed, and poorly aligned with the specific needs of inmates with significant childhood adversity histories, underscoring the urgent need for systematic reform of institutional support approaches within Kenya's maximum-security prison system.

Theoretical Framework

This study was anchored on two major theoretical perspectives: Psychoanalytic Theory and Social Learning Theory. These theories provide

complementary frameworks for understanding the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. The selection of these two theories was directly influenced by the four study variables, namely the prevalence and predominant types of adverse childhood experiences among inmates, the relationship between emotional abuse and criminal behavior, the relationship between physical abuse and criminal behavior, and the institutional strategies used to support inmates in coping with their adverse childhood experience histories. While the Psychoanalytic Theory offers insights into how early childhood experiences and unconscious processes shape adult behavior patterns including criminal conduct, the Social Learning Theory explains how individuals learn and adopt criminal behaviors through observation, imitation, and reinforcement of behaviors witnessed during childhood. Together, these theories provide a comprehensive foundation for examining how adverse childhood experiences among inmates may have contributed to the development of the criminal behavior patterns that ultimately led to their incarceration in Kenya's maximum-security prison system.

Psychoanalytic Theory

The Psychoanalytic Theory was developed by Sigmund Freud in the late 19th century as a comprehensive framework for understanding human personality, behavior, and psychological development (Freud, 1995). The theory proposes that human behavior and personality development are primarily shaped by unconscious forces, particularly early childhood experiences that leave lasting imprints on the

developing psyche (Elliott, 2017; Rapaport, 1960). The theory establishes that human personality is composed of three main elements: the id, representing primitive drives; the ego, serving as mediator between the id and reality; and the superego, functioning as the moral conscience, all of which interact dynamically to influence behavior and mental processes throughout the life course (Fenichel, 2014; Gedo and Goldberg, 1976). In the context of criminology, this theory directly informed the present study's examination of how adverse childhood experiences including emotional and physical abuse shape the personality structures of inmates in ways that contribute to criminal behavioral patterns in adulthood.

The structural model of the mind consists of three interconnected components that collectively determine behavioral outcomes across the life course. The id represents the primitive and instinctual part of personality, operating on the pleasure principle and seeking immediate gratification without regard for consequences or societal norms (Freud, 1995). The id contains basic drives such as aggression and sexuality which, when not properly regulated by the ego, can manifest directly as criminal behavior. The ego develops from the id and operates according to the reality principle, mediating between the id's demands and external reality and seeking socially acceptable ways to satisfy instinctual needs (Rapaport, 1960).

A weak or poorly developed ego, which frequently results from adverse childhood experiences including emotional and physical abuse during critical developmental periods, may fail to regulate impulses effectively, leading directly to criminal behavioral responses (Perlman and Brandell, 2010). The superego represents

internalized moral standards and ideals acquired from parents and society, functioning as the internal moral conscience that constrains the expression of id impulses (Elliott, 2017). When the superego is underdeveloped due to neglect or abuse during childhood, individuals may lack the internal moral constraints necessary to inhibit criminal behavioral impulses, increasing their likelihood of engaging in criminal conduct throughout adulthood.

The application of Psychoanalytic Theory to understanding the criminal behavior of inmates with adverse childhood experience histories is well established in criminological literature. According to the SAGE Encyclopedia of Criminal Psychology, when the ego has difficulty resolving conflicts between the id and superego, symptoms including criminal behavior may develop, with the theory informing criminal psychology by providing a framework for understanding the conscious and unconscious aspects of the minds of criminal offenders (SAGE Publications, 2019). Freud proposed in his 1916 work on criminality from a sense of guilt that many criminals were driven by unconscious guilt that preceded the crime and led to a need for punishment, establishing a foundational theoretical link between unconscious psychological processes rooted in childhood experiences and adult criminal behavior (Loewald, 1970). David Abrahamsen subsequently expanded this framework by proposing that criminal behavior emerges when an individual possesses strong criminal tendencies coupled with a diminished capacity for internal resistance, with adverse childhood experiences being primary contributors to the development of

both heightened tendencies toward criminal behavior and reduced internal resistance to such impulses (IJNRD, 2025).

The relevance of Psychoanalytic Theory to the first objective of the present study on the prevalence and predominant types of adverse childhood experiences among inmates lies in the theory's fundamental premise that early experiences are stored in the unconscious and continue to influence behavior throughout life (Loewald, 1970). Understanding the prevalence and types of ACEs experienced by inmates is therefore crucial within this theoretical framework because each type of adverse childhood experience disrupts the normal development of id, ego, and superego structures in distinct ways that manifest as different patterns of criminal behavior in adulthood.

The theory is particularly relevant to the second objective on emotional abuse and criminal behavior because emotional abuse during childhood damages the developing ego, leading to poor impulse control, emotional dysregulation, and an increased likelihood of criminal behavioral responses when confronted with stressful situations in adulthood (Guntrip, 2008). With respect to the third objective on physical abuse and criminal behavior, the theory posits that physical abuse creates unconscious aggression stored within the id that manifests as violent criminal behavior when the weakened ego fails to contain these primitive impulses and the underdeveloped superego fails to provide adequate moral restraint (Fenichel, 2014). Regarding the fourth objective on institutional strategies, the theory suggests that addressing unconscious conflicts through therapeutic interventions within prison settings can

help inmates develop healthier coping mechanisms and reduce the risk of reoffending (Perlman and Brandell, 2010).

The Psychoanalytic Theory makes several key assumptions about human behavior and development that are relevant to understanding criminal behavior among inmates with adverse childhood experience histories. It assumes that unconscious mental processes govern much of human behavior including criminal conduct (Brakel, 2004; Noy, 1969). It posits that childhood experiences, particularly those occurring in the first six years of life, are crucial in shaping personality and behavior patterns that persist throughout adulthood (Janus, 2017; Waelder, 1933).

The theory assumes that human behavior is substantially determined by irrational forces, unconscious motivations, and biological and instinctual drives rather than purely by rational conscious decision-making (Nagel, 2020; Shulman, 1990). It further assumes that personality develops through a series of psychosexual stages, and fixation at any stage resulting from adverse childhood experiences can lead to psychological problems and behavioral difficulties in later life (Elliott, 2017).

The Psychoanalytic Theory offers several notable strengths in the context of the present study. It provides a comprehensive framework for understanding how early adverse childhood experiences including emotional and physical abuse leave lasting psychological imprints that influence criminal behavioral patterns in adulthood, directly supporting the theoretical rationale for all four study objectives (Perlman and Brandell, 2010). The theory's emphasis on unconscious processes and early developmental experiences aligns strongly with empirical research

demonstrating that inmates with higher ACE scores exhibit distinct patterns of emotional dysregulation and impulse control difficulties that increase their criminal risk (Maia et al., 2025). However, the theory also has significant weaknesses that must be acknowledged.

The most fundamental limitation is the lack of empirical testability, as the theoretical constructs of the id, ego, and superego lack clear operational definitions that would allow for direct empirical measurement and validation in research settings (SAGE Publications, 2019). It is impossible to directly observe, identify, or measure the id, ego, or superego within a research context, making direct empirical validation of the theory's core constructs challenging in studies such as the present one. To mitigate this limitation, the present study used the theory as an interpretive framework rather than as a directly measurable model, applying its conceptual insights to interpret empirical findings from validated instruments including the ACE-Q and Brief COPE questionnaire rather than attempting to directly measure ego or superego functioning among inmates. The theory's overemphasis on early childhood experiences and unconscious processes also neglects the role of social and environmental factors in shaping criminal behavior, a limitation that was mitigated in the present study by complementing the Psychoanalytic Theory with the Social Learning Theory, which explicitly accounts for environmental and social influences on criminal behavioral development.

Social Learning Theory

The Social Learning Theory was developed by Albert Bandura in 1977, building on earlier behavioral theories by introducing the critical role of cognitive processes and observational learning in human behavioral development (Bandura, 1977). The theory proposes that individuals learn through observation, imitation, and modeling of others' behaviors, with reinforcement playing a crucial role in the learning process (McLeod, 2011; Nabavi, 2012). The theory establishes that human behavior is learned through the ongoing reciprocal interplay of cognitive, behavioral, and environmental factors, making it particularly relevant for understanding how children who witness or experience adverse childhood experiences learn maladaptive behavioral patterns that persist into adulthood as criminal conduct (Bandura, 1969). In the context of the present study, Social Learning Theory directly informed the examination of how specific adverse childhood experiences, particularly emotional and physical abuse, expose children to maladaptive behavioral models that they subsequently imitate and internalize, creating learned behavioral pathways toward criminal conduct in adulthood.

The theory's central mechanism of observational learning was demonstrated by Bandura through his famous Bobo Doll experiments, in which children who observed adults engaging in aggressive behavior subsequently replicated that aggression when given the opportunity, demonstrating that aggressive and antisocial behaviors can be learned through observation without requiring direct reinforcement (Bandura, 1977). In the correctional setting, this principle is directly applicable to

understanding how inmates who observed or experienced physical abuse and emotional abuse during childhood learned that aggression and coercion are acceptable means of addressing conflict and meeting personal needs, a learned behavioral pattern that subsequently manifested as criminal conduct in adulthood (IACFP, 2021). Akers and Jensen (2017) further established that within correctional settings, inmates continue to influence each other's behaviors through social learning mechanisms, with those who join groups engaged in deviant behavior being more likely to escalate their own deviant conduct through reinforcement processes, demonstrating that social learning processes relevant to criminal behavior are not limited to childhood but continue throughout the life course including within prison environments.

Social Learning Theory directly supports the first objective of the present study on the prevalence and predominant types of adverse childhood experiences among inmates by providing a theoretical explanation for why children raised in environments with high levels of adverse experiences are more likely to develop criminal behavioral patterns in adulthood. Children learn behaviors by observing their immediate environment, including violent or abusive behaviors perpetrated by caregivers, and when adverse childhood experiences are prevalent in a child's environment, the behavioral models available for observation and imitation are more likely to include aggressive, manipulative, and antisocial behavioral patterns (Akers and Jennings, 2015).

Regarding the second objective on emotional abuse and criminal behavior, the theory posits that emotional abuse exposes children to negative behavioral models

including verbal aggression, intimidation, and psychological manipulation that they may subsequently imitate in their own interpersonal interactions in later life, increasing their likelihood of engaging in criminal behavioral conduct as adults (Rotter, 2021). The theory also provides a framework for understanding the relationship between physical abuse and criminal behavior as specified in the third objective, explaining that children who witness or directly experience physical abuse learn that violence is an acceptable and effective means of problem-solving and conflict resolution, thereby significantly increasing their likelihood of engaging in violent criminal behavior in adulthood (Akers and Jensen, 2017).

With respect to the fourth objective on institutional strategies for supporting inmates in coping with adverse childhood experiences, Social Learning Theory provides a particularly important theoretical framework for understanding how correctional institutions can effectively support inmates through rehabilitation programs. The theory suggests that inmates can learn positive and prosocial coping strategies through exposure to appropriate behavioral models, positive reinforcement of adaptive behaviors, and participation in structured rehabilitation programs that provide alternative behavioral frameworks to those learned through adverse childhood experiences (Pratt et al., 2010).

This theoretical proposition directly supports the implementation of trauma-informed institutional strategies within correctional settings, as these approaches provide inmates with new behavioral models, skills, and reinforcement structures that can help them replace the maladaptive behavioral patterns learned through childhood

adversity with healthier and more prosocial alternatives (Miller and Najavits, 2012). The theory also suggests that the prison environment itself functions as a powerful social learning context in which inmates continuously observe and reinforce each other's behaviors, making the quality of institutional programs and the behavioral norms promoted within correctional settings critically important determinants of rehabilitation outcomes.

The theory delineates four primary components in the learning process that are relevant to understanding how adverse childhood experiences contribute to criminal behavior among inmates. These components include attention to the model, retention of the observed behavior, reproduction of the conduct, and motivation to execute the behavior based on anticipated reinforcement (Rotter, 2021). This learning process operates within a social framework and is shaped by both direct reinforcement of behaviors and vicarious reinforcement through observing the consequences experienced by others who engage in similar behaviors (Akers and Jensen, 2017). In the context of inmates with adverse childhood experience histories, this process explains how children who observed caregivers using emotional abuse or physical violence to exert control and meet their needs learned to attend to, retain, and subsequently reproduce these behavioral patterns in their own lives, with the reinforcement received through successfully controlling others or avoiding harm providing the motivational basis for continued criminal behavioral conduct in adulthood.

The Social Learning Theory makes several key assumptions about human learning and behavior that are relevant to the present study. It assumes that learning is a cognitive process that can occur through observation without requiring immediate behavioral change, meaning that children can learn criminal behavioral patterns through observation of abusive experiences long before they have the opportunity or capacity to reproduce these behaviors (Hill et al., 2009; Tu, 2000). It posits that behavior is influenced by environmental factors but that individuals also retain agency in choosing their actions, acknowledging that not all individuals who experience adverse childhood experiences go on to engage in criminal behavior (Pratt et al., 2010). The theory assumes that reinforcement influences behavior but is not solely responsible for learning, recognizing that observational learning can occur in the absence of direct reinforcement (Akers and Jennings, 2019). It also assumes that individuals are capable of observational learning, self-regulation, and forethought, suggesting that rehabilitation programs within correctional settings can effectively support inmates in developing new behavioral patterns through structured learning experiences (Albert, 2017).

Strengths of Social Learning Theory in the context of the present study include its strong empirical support across diverse populations and settings, its practical applicability to the design of rehabilitation programs within correctional environments, and its ability to explain complex criminal behavioral patterns through observable and measurable learning mechanisms (Pratt et al., 2010; Neziroglu et al., 2008). The theory's emphasis on the role of environmental factors and behavioral

modeling in shaping criminal conduct aligns strongly with empirical evidence demonstrating that inmates with adverse childhood experience histories who were exposed to abusive behavioral models during childhood are significantly more likely to engage in violent and antisocial criminal behavior in adulthood (Watts and McNulty, 2013). However, the theory also has notable weaknesses in the context of the present study. Its potential oversimplification of human learning processes by focusing primarily on observable behaviors and environmental reinforcement neglects the role of unconscious psychological processes and early developmental trauma in shaping criminal behavioral patterns, a limitation that was mitigated by complementing it with the Psychoanalytic Theory. The theory also has limited attention to biological factors that may influence criminal behavioral predispositions, and some of the cognitive processes involved in observational learning and self-regulation are difficult to measure directly within a research context (Akers and Jensen, 2011). These limitations were mitigated in the present study through the use of validated instruments including the ACE-Q and Brief COPE questionnaire that captured observable behavioral outcomes and coping responses rather than relying on direct measurement of unobservable cognitive processes.

Thus, both the psychoanalytic theory and the social learning theory are essential and complementary theoretical foundations for the present study. While the Psychoanalytic Theory explains the unconscious, developmental, and intrapsychic aspects of how adverse childhood experiences including emotional and physical abuse disrupt the healthy development of personality structures that regulate impulse control

and moral judgment among inmates, the Social Learning Theory illuminates the environmental, observational, and reinforcement-based learning mechanisms through which specific criminal behavioral patterns are acquired, maintained, and potentially modified through institutional intervention programs within correctional settings. Together, these theoretical perspectives provide a comprehensive and mutually reinforcing explanatory framework for all four study objectives, enabling a deeper and more nuanced understanding of the complex pathways through which adverse childhood experiences contribute to the criminal behavioral patterns observed among inmates in selected maximum-security prisons in Nairobi City County, Kenya.

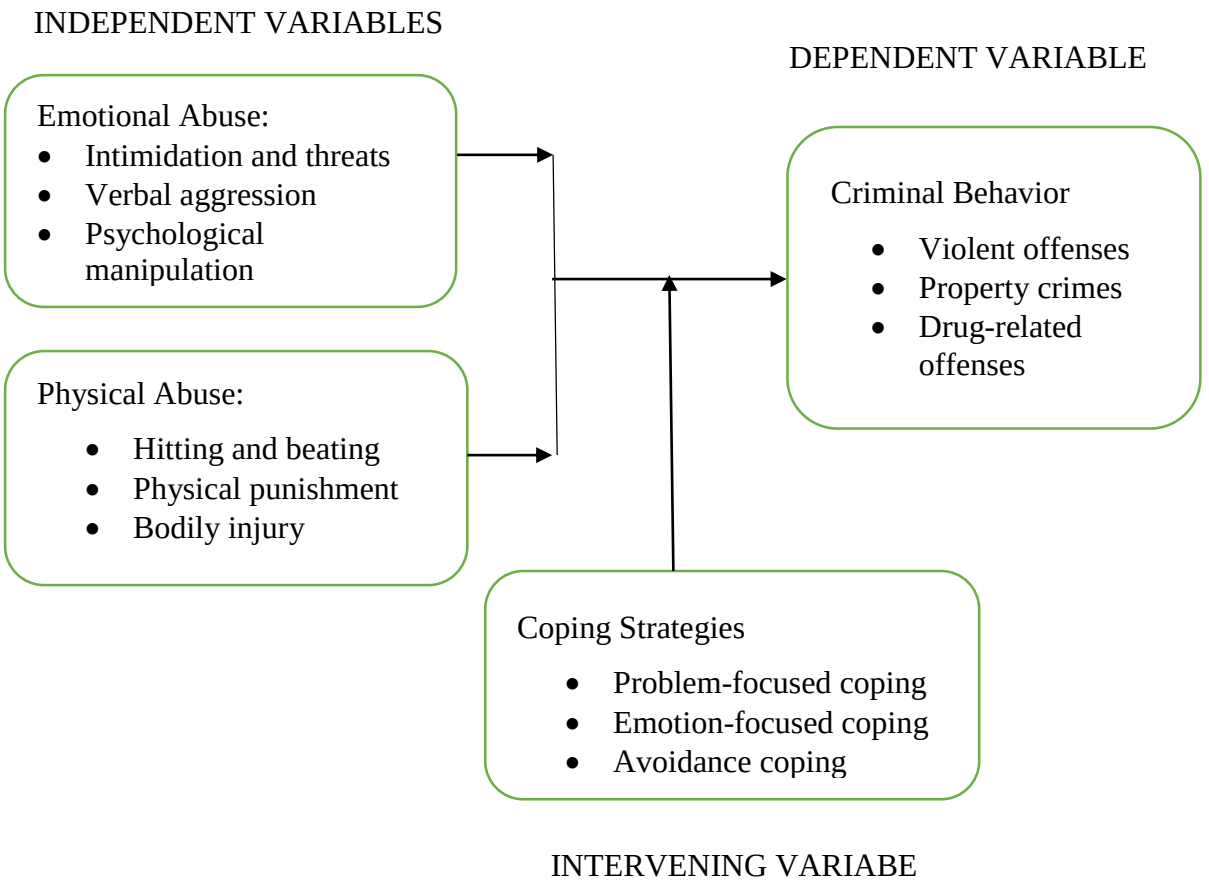
Conceptual Framework

The conceptual framework demonstrates the hypothesized relationships between the study variables, guided by both the Psychoanalytic Theory and the Social Learning Theory as theoretical foundations and supported by empirical literature (Ravitch and Riggan, 2016). The framework positions emotional abuse and physical abuse as the independent variables, criminal behavior as the dependent variable, and institutional strategies used to support inmates in coping with adverse childhood experiences as the intervening variable. The independent variables of emotional abuse and physical abuse are conceptualized through specific indicators representing common forms of childhood maltreatment experienced before the age of eighteen. Emotional abuse is operationalized through indicators including intimidation and threats, verbal aggression, and psychological manipulation, while physical abuse is operationalized through indicators including hitting and beating, physical punishment,

and bodily injury. The dependent variable of criminal behavior is operationalized through three main categories of offenses, namely violent offenses, property crimes, and drug-related offenses, which represent the most common criminal behavioral patterns observed among the maximum-security prison population studied.

Figure 1

Conceptual Framework



The first directional relationship in the framework runs from the independent variables of emotional abuse and physical abuse directly to the dependent variable of criminal behavior. Drawing from the Psychoanalytic Theory, adverse childhood

experiences of emotional and physical abuse disrupt the healthy development of the ego and superego, creating unconscious impulses and reducing internal moral restraint in ways that increase the likelihood of criminal behavioral responses in adulthood (Fenichel, 2014). The Social Learning Theory further explains this direct relationship by proposing that children who experience emotional and physical abuse are exposed to maladaptive behavioral models that they subsequently imitate and internalize, manifesting as criminal conduct in adulthood (Bandura, 1977).

The second directional relationship positions institutional strategies used to support inmates in coping with adverse childhood experiences as an intervening variable between the independent variables and criminal behavior. This means that the effectiveness or inadequacy of institutional strategies available within correctional facilities may either mitigate or amplify the influence of emotional and physical abuse histories on criminal behavioral outcomes among inmates. Effective trauma-informed institutional strategies that adequately support inmates in developing healthy coping responses to their adverse childhood experience histories may reduce the translation of those experiences into continued criminal conduct, while inadequate or absent institutional support may allow the full criminogenic impact of emotional and physical abuse to persist unchecked (Miller and Najavits, 2012). The framework therefore illustrates that understanding the relationship between adverse childhood experiences and criminal behavior requires examining both the direct influence of abuse on criminal conduct and the moderating role of institutional strategies within the correctional context.

Synthesis of Research Gap

While studies have extensively explored ACE prevalence among prison populations, there is a significant lack of comprehensive data on the prevalence and predominant types of adverse childhood experiences among both male and female inmates in Kenyan maximum-security prisons. Previous Kenyan studies have either focused on single-gender populations or youth, leaving a gap in understanding gender-specific ACE patterns and their predominant types among adult inmates in Kenya. This study addressed this gap by establishing the prevalence and predominant types of adverse childhood experiences experienced by both male and female inmates in Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison, providing the first comprehensive gender-inclusive data on ACE prevalence within Kenya's maximum-security correctional system.

No studies have specifically examined the relationship between emotional abuse during childhood and subsequent criminal behavior patterns among Kenyan inmates in maximum-security prison settings. This gap was particularly significant given that emotional abuse was identified as one of the most prevalent forms of adverse childhood experiences globally and regionally, yet its specific contribution to criminal behavioral patterns within the Kenyan correctional context remained entirely unexplored (Li et al., 2020). This study filled this gap by establishing the nature and strength of the relationship between childhood emotional abuse and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County,

generating contextually relevant evidence for developing targeted intervention strategies.

Although international research has consistently established links between physical abuse and criminal behavior across diverse populations, no studies had specifically examined this relationship within Kenyan maximum-security prisons or considered the cultural and contextual factors unique to the Kenyan setting that may influence how physical abuse during childhood translates into criminal behavioral patterns in adulthood (Watts and McNulty, 2013). This study addressed this critical gap by investigating how childhood physical abuse contributed to specific criminal behavior patterns among both male and female inmates in Kenya's maximum-security prisons, generating locally relevant evidence that can inform culturally appropriate rehabilitation and prevention strategies.

There was a critical absence of research on the institutional strategies available to support inmates with adverse childhood experience histories in Kenyan maximum-security prisons. Existing studies had focused on general rehabilitation programs within Kenyan correctional facilities without specifically addressing the adequacy of institutional strategies in supporting inmates in coping with the psychological impacts of their childhood trauma histories (Mutia, 2025). This study identified and evaluated the institutional strategies currently available within selected maximum-security prisons to support inmates in coping with adverse childhood experiences, providing evidence-based recommendations for reforming and strengthening trauma-informed institutional support approaches within Kenya's correctional system.

Chapter Summary

This chapter has presented a comprehensive review of literature related to adverse childhood experiences and criminal behaviour among incarcerated populations. Beginning with general literature establishing the global context of adverse childhood experiences and their relationship with criminal behavior, the chapter then examined empirical studies from global, regional, and local contexts guided by the four study objectives. Through this examination, the chapter explored four key areas: the prevalence and predominant types of adverse childhood experiences among inmates, the relationship between childhood emotional abuse and criminal behaviour, the relationship between childhood physical abuse and criminal behaviour, and institutional strategies used to support inmates in coping with adverse childhood experiences within prison settings. The theoretical framework section discussed the Psychoanalytic Theory and the Social Learning Theory as foundational perspectives for understanding how early childhood experiences influence later criminal behaviour, including a discussion of each theory's core principles, assumptions, strengths, weaknesses, and relevance to the study variables. The chapter concluded with a conceptual framework illustrating the hypothesized relationships between emotional and physical abuse as independent variables, institutional coping strategies as the intervening variable, and criminal behaviour as the dependent variable. The next chapter presents the study's research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter presents the procedures that guided the study's data collection process. It begins with an explanation of the research design, followed by a description of the study location and the target population. The chapter then details the sampling methods used, including the process of sample size determination. It continues with a discussion of the inclusion and exclusion criteria, followed by an overview of the data collection instruments and a instrument pretesting conducted at Nairobi Remand and Allocation Maximum Security Prison to test the effectiveness and applicability of the research instruments prior to the main data collection exercise. The validity and reliability of the instruments are addressed, followed by a description of the data collection process and analysis methods. The chapter concludes with a discussion of the ethical considerations observed throughout the research and a chapter summary.

Research Design

This study employed a correlational research design with a mixed-methods approach, integrating both quantitative and qualitative data collection and analysis methods. A correlational design examines relationships between variables without manipulating them, allowing researchers to determine both the strength and direction of relationships between variables (Creswell and Creswell, 2018). According to

Kumar (2019), correlational research is particularly suitable when studying naturally occurring variables that cannot be manipulated for ethical or practical reasons. This design was appropriate for the present study as it helped establish the relationship between adverse childhood experiences and criminal behaviour among inmates in selected maximum-security prisons, where the independent variables of emotional abuse and physical abuse and the dependent variable of criminal behaviour could not be manipulated due to their historical nature and ethical considerations involved in conducting research within correctional settings.

The mixed-methods approach was adopted to enable a more comprehensive understanding of the study phenomenon than either quantitative or qualitative methods could provide independently. The quantitative component employed the correlational design to investigate the nature and extent of associations between specific adverse childhood experiences, namely emotional abuse and physical abuse as independent variables, and patterns of criminal behaviour as the dependent variable among inmates. The qualitative component involved semi-structured interviews with key informants including prison counsellors, wardens, and probation officers, which provided rich contextual insights into the institutional strategies used to support inmates in coping with adverse childhood experiences that could not be adequately captured through quantitative instruments alone.

Location of the Study

This study was carried out at two maximum-security prisons: Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison, both

located within Nairobi City County, Kenya. Nairobi City County is located in the southern part of the country with geographical coordinates of 1°17'S 36°49'E and is the largest city and the administrative capital of Kenya. The selected prisons are among the largest correctional facilities in Kenya, with Langata Women's Maximum Security Prison being the main female correctional facility in the country, while Kamiti Maximum Security Prison is the largest male prison facility (Musili et al., 2016). These facilities are strategically located within the metropolitan area, making them accessible for research purposes while maintaining necessary security protocols throughout the data collection period.

The selection of these locations is justified by several factors. First, these facilities house inmates from diverse socioeconomic backgrounds, educational levels, and cultural contexts, providing a representative sample of the Kenyan maximum-security prison population that enabled the study to examine the relationship between adverse childhood experiences and criminal behaviour across a broad and diverse inmate population. Second, both Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison have established psychological support services and rehabilitation programs, making them ideal sites for studying both the relationship between adverse childhood experiences and criminal behaviour and the institutional strategies available to support inmates in coping with their childhood adversity histories. Third, the prisons serve different gender populations, with Langata Women's Maximum Security Prison being female-only and Kamiti Maximum Security Prison being male-only, allowing for gender-specific analysis of the study

variables across both institutions. Additionally, these facilities have previously supported academic research, indicating their openness to evidence-based approaches to understanding and improving correctional services in Kenya (Muriuki, 2017).

Target Population

The study's target population consisted of inmates at Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison. As of January 2024, Langata Women's Maximum Security Prison had a capacity of about 700 female inmates, with an average daily population of approximately 650 inmates. On the other hand, Kamiti Maximum Security Prison had a maximum occupancy limit of 3,500 male inmates, with the average daily population often around 3,200 inmates, giving a total target inmate population of 4,200 inmates across both facilities. In addition, the study targeted 30 key informants who worked directly with inmates within the two selected prisons, comprising 10 prison counsellors who provided psychological support and rehabilitation services, 10 prison wardens who oversaw daily operations and security, and 10 probation officers who handled inmate rehabilitation and reintegration planning. These professionals were included in the target population as they possessed valuable professional insights into the behavioral patterns, rehabilitation processes, institutional strategies, and background histories of inmates with adverse childhood experience histories within the selected facilities.

Table 1:

Target Population

Prison Facility	Gender	Capacity	Current Population
Langata Women's Maximum Security Prison	Female	700	650
Kamiti Maximum Security Prison	Male	3,500	3,200
Total		4,200	3,850

Sampling Methods and Sample Size

The study employed stratified random sampling to ensure proportional representation of both male and female inmates from the target population for the quantitative component of the study. Stratified random sampling was appropriate because the population contained distinct subgroups and proportional representation was desired from each stratum (Taherdoost, 2016). In this study, gender served as the stratification variable, ensuring appropriate representation from both Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison. Using Krejcie and Morgan's (1970) sampling table, for a total inmate population of 4,200, the required sample size was 351 inmates at a 95% confidence level with a 5% margin of error. The sample was distributed proportionally according to the gender distribution in the target population, where females constituted 17% and males 83% of the total inmate population, resulting in 60 female inmates selected from Langata Women's Maximum Security Prison and 291 male inmates selected from Kamiti Maximum Security Prison.

The technique for selecting individual inmates within each stratum followed a systematic random selection process. Comprehensive lists of all inmates were obtained from each prison facility, separated by gender, and these lists served as the sampling frame for the study. Unique identification numbers were assigned to each inmate on the list, and using a random number generator, inmates were selected from each gender stratum until the required sample size for that stratum was achieved. This systematic random selection ensured that every inmate within each stratum had an equal probability of being selected, eliminating selection bias and enhancing the representativeness of the quantitative sample. The selection process resulted in 60 female inmates from Langata Women's Maximum Security Prison and 291 male inmates from Kamiti Maximum Security Prison being selected for participation in the quantitative component of the study through questionnaire administration.

For the qualitative component of the study, purposive sampling was used to select 30 key informants from both prison facilities. Purposive sampling was appropriate for the qualitative component as it enabled the researcher to deliberately select participants who possessed the specific professional knowledge, experience, and insights necessary to address the fourth study objective on institutional strategies used to support inmates in coping with adverse childhood experiences (Kumar, 2019). The 30 key informants comprised 10 prison counsellors, 10 prison wardens, and 10 probation officers drawn from both Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison. These professionals were selected based on their direct involvement in inmate rehabilitation, psychological support, and reintegration

planning, making them best positioned to provide authoritative qualitative data on the institutional strategies available within the selected maximum-security prisons. The qualitative data collected from key informants through semi-structured interviews was analyzed separately from the quantitative data using thematic analysis following Braun and Clarke's (2006) six-step framework.

Table 2:

Distribution of Sample Size by Prison Facility and Participant Category

Participant Category	Prison Facility	Gender	Population	Sample Size	Percentage
Inmates	Langata Women's Maximum Security Prison	Female	650	60	17%
Inmates	Kamiti Maximum Security Prison	Male	3,200	291	83%
Inmates Subtotal			3,850	351	100%
Prison Counsellors	Both Facilities	Mixed	10	10	100%
Prison Wardens	Both Facilities	Mixed	10	10	100%
Probation Officers	Both Facilities	Mixed	10	10	100%
Key Informants Subtotal			30	30	100%
Overall Total			3,880	381	

Inclusion and Exclusion Criteria

The study applied specific criteria to determine eligible participants for both the quantitative and qualitative components of the research. The inclusion and exclusion

criteria were established separately for inmates and key informants to ensure that only participants who could provide reliable and relevant data were included in the study.

Inclusion Criteria for Inmates

i. Adult inmates aged 18 years and above
ii. Currently serving sentences in either Langata Women's Maximum Security Prison or Kamiti Maximum Security Prison
iii. Ability to provide informed consent voluntarily and without coercion
iv. Ability to communicate effectively in either English or Kiswahili

Inclusion Criteria for Key Informants

i. Minimum of two years of working experience directly with inmates within a correctional setting
ii. Currently employed at either Langata Women's Maximum Security Prison or Kamiti Maximum Security Prison at the time of data collection
iii. Direct involvement in inmate rehabilitation, psychological support, or supervision activities within the selected facilities

Exclusion Criteria for Inmates:

i. Inmates with severe mental health conditions that significantly impaired their ability to understand the research instruments, recall past experiences accurately, or provide reliable responses
ii. Inmates in solitary confinement or under special security restrictions at the time of data collection

Exclusion Criteria for Key Informants

i. Staff members with less than two years of experience working directly with inmates

   Part-time or temporary staff members whose limited engagement with the prison environment would have compromised the depth and reliability of their professional insights

ii. Staff members who did not have direct contact with inmates in their daily work and therefore lacked the firsthand institutional knowledge necessary to meaningfully address the study objectives

Data collection Instruments

The study employed two primary data collection instruments designed to gather both quantitative and qualitative data in line with the mixed-methods research approach adopted. For inmate participants, a structured questionnaire containing two main sections was used to collect quantitative data. Section A collected sociodemographic information including age, gender, education level, marital status, employment history before incarceration, and current offense category. This demographic data provided important context for understanding the study population and potential influencing factors on the relationship between adverse childhood experiences and criminal behavior among the incarcerated participants at both Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison.

Section B utilized the standard Adverse Childhood Experiences Questionnaire, which is a validated and widely used instrument for assessing adverse childhood

experiences across diverse populations globally (Felitti et al., 1998). While the ACE-Q is a standardized tool that is typically used in its original form, the present study made minor contextual adaptations to two specific items to ensure cultural appropriateness and clarity for the Kenyan prison population, without altering the core constructs or psychometric properties of the instrument. This adaptation was justified by the need to ensure that participants from diverse educational backgrounds and cultural contexts within the Kenyan correctional setting could accurately understand and respond to the items, thereby enhancing the validity and reliability of the data collected from inmates at both selected maximum-security prisons.

The emotional abuse component of the adapted instrument assessed experiences of verbal hostility, humiliation, and psychological intimidation through items examining whether a parent or other adult in the household often swore at, insulted, put down, or humiliated the respondent, and whether they acted in ways that made the respondent fear physical harm. The physical abuse component evaluated experiences of direct physical violence through items examining whether a parent or other adult in the household pushed, grabbed, slapped, or threw things at the respondent, and whether they inflicted hits that left marks or injuries. Each item was rated on a 5-point Likert scale ranging from 1 representing never to 5 representing very often, allowing for precise measurement of abuse frequency and severity that was essential for the correlational analysis conducted to address the second and third study objectives.

For key informants comprising prison counsellors, wardens, and probation officers, a semi-structured interview guide was used to collect qualitative data addressing the fourth study objective on institutional strategies used to support inmates in coping with adverse childhood experiences. This guide explored the professional observations of key informants regarding the institutional strategies available within the selected prisons, the effectiveness of those strategies in supporting inmates with adverse childhood experience histories, and the barriers encountered in implementing trauma-informed approaches within the correctional setting. These in-depth interviews provided valuable contextual information that complemented the quantitative data collected from inmates and enabled a more comprehensive understanding of the institutional support landscape within Kenya's selected maximum-security prisons.

Validity of the Instruments

The validity of the research instruments was established through several methods prior to and during the main data collection exercise. Content validity was assessed by having the instruments reviewed by subject matter experts including prison psychologists and research methodologists to ensure they adequately covered the intended constructs related to adverse childhood experiences, criminal behavior, and institutional coping strategies. Construct validity was established through the use of the ACE-Q, which has demonstrated strong construct validity across multiple international studies with Cronbach's alpha coefficients consistently ranging from 0.83 to 0.89 across diverse population groups (Felitti et al., 1998). The Brief COPE

inventory similarly demonstrated strong construct validity in its original validation study with factor loadings ranging from 0.50 to 0.90 across its subscales, confirming that it adequately measures the distinct coping strategy dimensions it was designed to assess (Carver, 1997). Face validity was further assessed during the instrument pretesting conducted at Nairobi Remand and Allocation Maximum Security Prison by gathering feedback from participants about their understanding of the questions, with minor adjustments made based on participant feedback before the main data collection commenced at the two selected maximum-security prison facilities.

Reliability of The Instruments

The reliability of the research instruments was assessed using established psychometric methods appropriate for the quantitative instruments employed in the study. For the ACE-Q, the original validation study reported a Cronbach's alpha coefficient of 0.88, indicating strong internal consistency reliability across the instrument's items (Felitti et al., 1998). Subsequent studies using the ACE-Q in African contexts have reported Cronbach's alpha coefficients ranging from 0.79 to 0.86, confirming the instrument's reliability across diverse cultural contexts including sub-Saharan African populations (Naidoo et al., 2024). For the Brief COPE inventory, Carver (1997) reported Cronbach's alpha coefficients ranging from 0.50 to 0.90 across the instrument's fourteen subscales in the original validation study, with the religious coping, active coping, and acceptance subscales demonstrating the strongest internal consistency reliability. In the present study, the internal consistency reliability of both instruments was further confirmed through the instrument pretesting conducted at

Nairobi Remand and Allocation Maximum Security Prison, with Cronbach's alpha coefficients of 0.81 for the ACE-Q items and 0.76 for the Brief COPE items exceeding the minimum acceptable threshold of 0.70 recommended by Nunnally and Bernstein (1994).

Data Collection Process

Prior to data collection, the researcher obtained all necessary approvals starting with authorization from the Pan Africa Christian University Ethics Review Committee, the National Commission for Science, Technology and Innovation (NACOSTI), the Kenya Prisons Service, and the respective prison authorities at Langata and Kamiti Maximum Security Prisons. Upon securing these approvals, the researcher conducted a preliminary visit to each facility to meet with prison administrators, explain the study's purpose, and establish a suitable schedule for data collection that does not interfere with prison routines. The researcher then worked with prison officials to identify potential participants who meet the inclusion criteria. Selected participants were briefed about the study's purpose, procedures, and ethical considerations, and those willing to participate were required to sign informed consent forms.

The actual data collection began with the administration of questionnaires to inmates in small groups or individually, depending on prison security protocols. The researcher was present during questionnaire administration to clarify any questions and ensure proper completion. For key informants, individual in-depth interviews as

scheduled at times convenient for their work schedules, with each interview expected to last approximately 45-60 minutes.

Instrument Pretesting

An instrument pretesting was conducted at Nairobi Remand and Allocation Maximum Security Prison to test the effectiveness and applicability of the research instruments prior to the main data collection exercise. According to Baker (1994), an instrument pretesting allows researchers to identify potential problems in the research process and make necessary adjustments before the main study commences. The instrument pretesting involved 10% of the sample size comprising 35 inmate respondents, maintaining the same gender proportion as the main study with 29 male inmates representing 83% and 6 female inmates representing 17%. In addition, nine key informants participated in the instrument pretesting comprising three prison counsellors, three wardens, and three probation officers who met the inclusion criteria but did not participate in the main study, bringing the total instrument pretesting sample to 44 participants. Nairobi Remand and Allocation Maximum Security Prison was selected as the instrument pretesting site because it shares similar institutional characteristics with the two main study sites while being sufficiently distinct to ensure that pilot participants would not overlap with the main study sample.

The instrument pretesting served multiple purposes in preparing for the main data collection exercise. It assessed the clarity and cultural appropriateness of questions in both English and Kiswahili versions of the instruments, evaluated the effectiveness of the semi-structured interview process for key informants, determined

the average time required for completing questionnaires and conducting interviews, and identified potential logistical challenges within the prison setting. Special attention was paid to ensuring that the 5-point Likert scale was well understood by participants of varying educational backgrounds within the correctional setting. The instrument pretesting findings revealed that the instruments were generally clear and culturally appropriate, with minor wording adjustments made to two items in the ACE-Q to enhance clarity for participants with lower levels of formal education. The average time for questionnaire completion was established at approximately 35 minutes for inmates and 50 minutes for key informant interviews, which informed the scheduling of the main data collection sessions at Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison.

Data Analysis

To accomplish the study's goals, both quantitative and qualitative data analysis techniques were used in line with the mixed-methods research approach adopted. The Statistical Package for Social Sciences version 28.0 was used to code, clean, and analyze the quantitative data obtained from the structured questionnaires administered to inmates. SPSS version 28.0 was selected for data analysis because it was the version available and licensed for use at the time of data analysis during the study period, and it provided all the statistical functions required to address the quantitative study objectives, including descriptive statistics and Pearson correlation coefficient analysis (Field, 2018). Descriptive statistics including frequencies, percentages, means, and standard deviations were employed to examine demographic data and

determine the prevalence and predominant types of adverse childhood experiences among inmates in the selected maximum-security prisons in line with the first study objective.

The associations between criminal behavior and adverse childhood experiences, specifically emotional abuse and physical abuse, were investigated using inferential statistics, particularly Pearson's correlation coefficient, which was selected as the appropriate statistical test for examining the strength and direction of relationships between continuous variables in correlational research designs (Creswell and Creswell, 2018). Pearson's correlation analysis rather than regression analysis was applied because the study sought to establish the nature and strength of relationships between the variables rather than to predict outcomes, which is consistent with the correlational research design adopted. With a significance level set at p less than 0.05, the analysis ascertained the direction and strength of correlations between emotional abuse and criminal behavior for the second objective, and between physical abuse and criminal behavior for the third objective. The gender distribution of the sample, comprising 17% female inmates and 83% male inmates, was proportional to the actual gender distribution in the target population of 4,200 inmates and therefore accurately represented the population structure in the statistical analyses conducted.

Qualitative data from the in-depth interviews with key informants was analyzed using thematic analysis following Braun and Clarke's (2006) six-step framework, which provided the systematic analytical approach required for the qualitative component of the mixed-methods design. The six steps followed were:

familiarization with the data through multiple readings of verbatim transcripts, generation of initial codes from the data, searching for themes by grouping related codes, reviewing themes to ensure they accurately represented the coded data, defining and naming the finalized themes, and producing the written thematic analysis report. The analysis focused on identifying patterns in how key informants perceived the institutional strategies available to support inmates in coping with adverse childhood experiences within the selected maximum-security prisons, directly addressing the fourth study objective. The integration of quantitative and qualitative findings was achieved through a convergent parallel mixed-methods approach in which both data sets were analyzed independently and then merged during interpretation to provide a more comprehensive understanding of the study phenomenon.

Table 3:

Summary of Data Analysis

Objective	Independent Variable	Dependent Variable	Statistic
To determine the prevalence and predominant types of adverse childhood experiences among inmates in selected maximum-security prisons within Nairobi City County, Kenya.	Adverse childhood experiences		Frequencies, percentages, mean scores
To establish the relationship between emotional abuse and criminal behaviour among inmates in selected maximum-security prisons within Nairobi City County, Kenya.	Emotional abuse	Criminal behaviour	Frequencies, mean scores, Pearson correlation coefficient

Objective	Independent Variable	Dependent Variable	Statistic
To examine the relationship between physical abuse and criminal behaviour among inmates in selected maximum-security prisons within Nairobi City County, Kenya.	Physical abuse	Criminal behaviour	Frequencies, mean scores, Pearson correlation coefficient
To evaluate institutional strategies used to support inmates in coping with adverse childhood experiences in selected maximum-security prisons within Nairobi City County, Kenya.	Institutional strategies		Thematic analysis

Data analysis was conducted using SPSS version 28.0 for quantitative data and thematic analysis following Braun and Clarke (2006) for qualitative data.

Ethical Considerations

The researcher observed strict ethical standards throughout the study, with special attention to the vulnerable nature of the prison population. Prior to commencing the research, approval was obtained from the Pan Africa Christian University Ethics Review Committee, the National Commission for Science, Technology and Innovation (NACOSTI), and the Kenya Prisons Service. All participants were given comprehensive information about the study's goals, procedures, risks and benefits of participation, and their rights as participants before informed consent was sought. To guarantee thorough comprehension, the material was presented in both English and Kiswahili. This briefing process ensured that all participants had a complete and accurate understanding of what their participation in the study would involve before they agreed to take part in the data collection exercise.

Voluntary participation was strictly upheld throughout the entire data collection process at both Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison. All participants were explicitly informed that their participation in the study was entirely voluntary and that they were under no obligation to participate regardless of any instructions from prison authorities. Participants were further informed that declining to participate or withdrawing from the study at any point would have no negative consequences whatsoever on their treatment within the prison, their sentence, or their relationship with prison staff and authorities. Written informed consent was obtained from every participant prior to data collection, with participants being required to sign consent forms only after confirming that they had fully understood the study information and had made the decision to participate freely and without any form of coercion or pressure from any party involved in the research process.

Given the sensitivity of discussing challenging childhood experiences, participants were informed of their right to withdraw from the study at any point without penalty. Counselling services were made available through prison mental health professionals for participants who experienced emotional distress during or after participation. Participants who showed signs of re-traumatization during data collection were immediately offered a break and referred to prison counsellors for immediate support. Follow-up counselling sessions were arranged for all participants who reported significant distress, with continued access to psychological services for up to three months post-participation. Research assistants were trained for two days

prior to data collection on ethical procedures, trauma-informed interviewing techniques, recognizing signs of emotional distress, appropriate response protocols, and referral procedures to ensure the safety and wellbeing of all participants throughout the data collection process.

Confidentiality and privacy were strictly maintained throughout the research process. All data collected was kept confidential, with participants identified only by codes rather than names to protect their identities throughout the study. Electronic data was encrypted and password-protected, while physical data was kept in locked cabinets accessible only by the researcher. Transcripts and recordings of the interviews were safely archived and would be deleted five years after the study was completed. The researcher ensured that no details that could identify specific participants were included in the final report, and all research assistants and support staff involved in the study were required to sign confidentiality agreements before participating in any aspect of data collection within the selected maximum-security prison facilities.

The issue of plagiarism and intellectual integrity was strictly observed throughout the research process and in the writing of this thesis. All sources consulted and cited in the study were properly acknowledged following the APA 7th edition referencing guidelines to give appropriate credit to the original authors of all works used to inform the study. The researcher ensured that all information drawn from existing literature was accurately paraphrased and appropriately cited, with direct quotations used sparingly and always accompanied by proper attribution to the

original source. The thesis was subjected to plagiarism detection screening prior to submission to ensure that all content met the intellectual integrity standards required by Pan Africa Christian University, and no content was presented as original work of the researcher where it had been drawn from or informed by the work of other scholars.

Following the completion of data collection at both Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison, all participants were debriefed about the outcomes and purposes of the study in a structured debriefing session conducted by the researcher and trained research assistants. The debriefing sessions provided participants with an opportunity to ask questions about the study, clarify any concerns that had arisen during their participation, and receive information about how the findings would be used to inform policy and practice within Kenya's correctional system. Participants who experienced residual emotional distress following the data collection sessions were provided with referrals to prison mental health professionals for continued support, and all participants were thanked for their valuable contribution to the study and reminded of the confidentiality measures in place to protect their identities throughout the research process and in the final thesis report.

Chapter Summary

This chapter outlined the methodological framework adopted to examine the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons within Nairobi City County, Kenya. The

chapter described the correlational research design with a mixed-methods approach adopted to capture both quantitative and qualitative data, followed by a description of the study location at Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison. The characteristics of the target population were presented including clearly defined inclusion and exclusion criteria established separately for both inmates and key informants. The sampling methods were described, differentiating between stratified random sampling used to select 351 inmates and purposive sampling used to select 30 key informants for the qualitative component of the study.

The data collection instruments were described including the ACE-Q and Brief COPE questionnaire administered to inmates and the semi-structured interview guide used with key informants, along with the justification for minor contextual adaptations made to the standardized instruments. A instrument pretesting conducted at Nairobi Remand and Allocation Maximum Security Prison was described including its findings and how they informed refinements to the instruments prior to the main data collection exercise. The chapter further detailed procedures undertaken to ensure the validity and reliability of the research instruments including expert review and psychometric properties of both tools. The data collection process was outlined emphasizing adherence to standardized procedures within the prison environment, followed by data analysis methods summarized in a table. The chapter concluded with ethical considerations including voluntary participation, confidentiality, debriefing, and plagiarism prevention. The next chapter presents the results of the study.

CHAPTER FOUR

RESULT AND DISCUSSION

Introduction

This chapter presents the data analysis, presentation of results, interpretation of findings and discussion. The chapter covers the general information including response rates, demographic characteristics of participants and detailed analysis of findings according to each of the four study objectives.

Presentation of Results

The presentation of results is done in sections.

General Information

The general information includes the response rate and the demographic characteristics of the respondents. Each section is discussed in depth to provide a clear understanding of the study sample and its key attributes.

Response Rate

For data collection, a total of 351 questionnaires were administered to targeted inmate respondents at Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison in Nairobi City County. The researcher received 309 questionnaires that were properly completed and met the criteria for participation in the study, giving a response rate of 88.0%. The discussion on the findings was therefore conducted using the 309 completed questionnaires received from inmate participants.

For the qualitative component, a total of 30 key informant interview guides were administered to prison counsellors, wardens, and probation officers at both selected facilities. All 30 key informants participated and completed the interviews, giving a key informant response rate of 100%, resulting in a combined overall response rate of 90.2% across both participant categories in the study.

Table 4:

Response Rate

Category	Administered	Completed	Response Rate
Inmate Questionnaires	351	309	88.0%
Key Informant Interviews	30	30	100.0%
Overall Total	381	339	89.0%

Table 4 presents the response rate for both inmate participants and key informants. The inmate response rate of 88.0% indicates a high level of participation from the targeted respondents, exceeding the recommended threshold for survey research. According to Creswell and Creswell (2018), response rates above 80% are considered excellent for survey research as they minimize non-response bias and enhance the generalizability of findings. The key informant response rate of 100% reflects the high level of professional commitment among prison counsellors, wardens, and probation officers who participated in the qualitative interviews, and can be attributed to the institutional support received from prison authorities at both selected facilities throughout the data collection period.

The 12.0% non-response rate among inmates was primarily due to inmates who declined to participate at 7.4%, those who were transferred to other facilities during the data collection period at 2.8%, and incomplete questionnaires that did not meet the study inclusion criteria at 1.8%. The combined overall response rate of 89.0% across both participant categories strengthens the validity of the study findings and reduces concerns about selection bias that could affect the interpretation of results regarding the relationship between adverse childhood experiences and criminal behavior among inmates in the selected maximum-security prisons.

Demographic Characteristics

This section presents the demographic characteristics of the respondents, including gender, age group, education level, marital status, employment status before incarceration, and sentence length. These characteristics provide important context for understanding the study population and interpreting the results.

Table 5:

Gender Distribution

Gender	Frequency	Percentage
Male	255	82.5%
Female	54	17.5%
Total	309	100%

Table 5 presents the gender distribution. The findings reveal that males accounted for the majority of respondents at 82.5% comprising 255 participants,

while females represented 17.5% comprising 54 participants. This gender distribution is consistent with international prison demographics where males consistently represent the majority of incarcerated populations (Walmsley, 2017). Research indicates that males are disproportionately represented in criminal justice systems globally, with factors such as differential exposure to risk factors, socialization processes, and varying patterns of criminal behavior contributing to this disparity (Kruttschnitt, 2013). The overrepresentation of males has important implications for understanding how adverse childhood experiences may differently impact criminal behavior patterns across genders within the selected maximum-security prison facilities.

Table 6:

Age Group Distribution

Age Group	Frequency	Percentage
18-25 years	87	28.2%
26-35 years	132	42.7%
36-45 years	68	22.0%
46 years and above	22	7.1%
Total	309	100%

Table 6 shows the age group distribution. The data reveals that the majority of respondents (42.7%, 132) were in the 26-35 years age group, followed by 28.2% (87) in the 18-25 years age group. This age distribution aligns with typical prison demographics where young adults constitute the largest proportion of incarcerated

populations (Bronson & Carson, 2019). The concentration of inmates in the 26-35 years age group suggests that many offenders begin their criminal careers in their late teens or early twenties and continue into their thirties. From a developmental perspective, this age range represents critical years for identity formation and life trajectory establishment, making it particularly important to understand how adverse childhood experiences may have influenced their path toward criminal behavior (Moffitt, 2018).

Table 7:

Educational Level

Education Level	Frequency	Percentage
No formal education	45	14.6%
Primary education	134	43.4%
Secondary education	98	31.7%
College/University education	32	10.4%
Total	309	100%

Table 7 presents the education level. The data shows that the highest proportion of respondents, 43.4 % (134) had completed primary education, followed by 31.7% (98) with secondary education, and 14.6% (45) with no formal education. Only 10.4% (32) had attained college or university level education. This distribution

reflects the broader relationship between educational attainment and criminal behavior documented in criminological research (Lochner & Moretti, 2004). The low levels of educational achievement among the sample are consistent with studies showing that limited education is associated with increased criminality risk. However, research emphasizes that the relationship between education and criminal behavior is complex and multifaceted, with adverse childhood experiences potentially disrupting educational trajectories and contributing to both academic failure and subsequent criminal involvement (Hirschfield & Gasper, 2011).

Table 8:

Marital Status

Marital Status	Frequency	Percentage
Single	178	57.6%
Married	89	28.8%
Divorced/Separated	32	10.4%
Widowed	10	3.2%
Total	309	100%

Table 8 presents the marital status. The findings reveal that the majority of respondents at 57.6% comprising 178 participants were single, followed by 28.8% comprising 89 participants who were married, 10.4% comprising 32 participants who

were divorced or separated, and 3.2% comprising 10 participants who were widowed. The high proportion of single individuals reflects patterns commonly observed in prison populations, where unstable family relationships and social bonds are associated with increased criminal behavior risk (Sampson et al., 2006). Research suggests that marriage and stable relationships can serve as protective factors against criminal behavior, while adverse childhood experiences may impair individuals' ability to form and maintain healthy relationships in adulthood (Giordano et al., 2002).

Table 9:

Sentence Length Distribution

Sentence Category	Frequency	Percentage
Less than 5 years	45	14.6%
5-10 years	68	22.0%
11-15 years	52	16.8%
16-20 years	38	12.3%
21-30 years	41	13.3%
More than 30 years	12	3.9%
Life sentence	42	13.6%
Remanded	11	3.6%
Total	309	100%

Table 9 presents the sentence length distribution. The findings reveal that the largest proportion of respondents at 22.0% comprising 68 participants were serving sentences of 5 to 10 years, followed by 16.8% comprising 52 participants serving 11 to 15 years, 14.6% comprising 45 participants serving less than 5 years, 13.6% comprising 42 participants serving life sentences, 13.3% comprising 41 participants serving 21 to 30 years, 12.3% comprising 38 participants serving 16 to 20 years, 3.9% comprising 12

participants serving more than 30 years, and 3.6% comprising 11 participants who were remanded awaiting trial. The distribution of sentence lengths provides insight into the severity of crimes committed by the study population, with over half of the respondents receiving sentences of 10 years or more, suggesting that many participants were convicted of serious offenses that may be related to the severity of adverse childhood experiences and their impact on criminal behavior trajectories (Baglivio et al., 2015).

Table 10:

Type of Offense

Type of Offense	Frequency	Percentage
Violent offense	142	46.0%
Property crime	89	28.8%
Drug-related offense	52	16.8%
Other	26	8.4%
Total	309	100%

Table 10 presents the distribution of offense. The findings reveal that violent offenses constituted the highest proportion at 46.0% comprising 142 participants, followed by property crimes at 28.8% comprising 89 participants, drug-related offenses at 16.8% comprising 52 participants, and other offenses at 8.4% comprising 26 participants. The predominance of violent offenses among maximum-security prison inmates is consistent with the classification criteria for such facilities, which typically house individuals convicted of serious crimes requiring heightened security measures (United Nations Office on Drugs and Crime, 2013). This distribution of offense types provides important contextual background for understanding the nature of criminal behavior among the study population and for interpreting the findings of

the second and third study objectives on the relationship between emotional and physical abuse and criminal behavior.

Research consistently demonstrates that exposure to violence and trauma during childhood increases the likelihood of perpetrating violence in adulthood, with individuals who experienced childhood physical abuse being significantly more likely to engage in violent criminal behavior in later life, suggesting a cycle of violence that extends from childhood victimization to adult perpetration (Maxfield and Widom, 1996). The substantial representation of property crimes at 28.8% aligns with criminological research indicating that economic disadvantage and family instability, often associated with adverse childhood experiences, contribute to acquisitive criminal behavior among affected individuals (Wright et al., 1999). Drug-related offenses at 16.8% are particularly relevant given the established link between childhood trauma and substance abuse as a maladaptive coping mechanism, which subsequently increases involvement in drug-related criminal activities among individuals with significant adverse childhood experience histories (Dube et al., 2003).

Prevalence and Predominant Types of Adverse Childhood Experiences

This section presents findings related to the first objective of the study, which sought to determine the prevalence and predominant types of adverse childhood experiences among inmates in selected maximum-security prisons in Nairobi City County, Kenya.

Table 11:

ACE Prevalence Among Inmates

ACE Category	Frequency	Percentage
No ACEs (0)	23	7.4%
Low ACEs (1)	78	25.2%
Moderate ACEs (2)	132	42.7%
High ACEs (2+)	76	24.6%
Total	309	100%

Table 11 presents the ACE prevalence among inmates. The overall prevalence of adverse childhood experiences among the study population was 92.6%, with 286 out of 309 respondents reporting at least one adverse childhood experience. Specifically, 25.2% comprising 78 respondents reported low ACE exposure having experienced one adverse childhood experience. A further 42.7% comprising 132 respondents reported moderate ACE exposure having experienced two adverse childhood experiences. Additionally, 24.6% comprising 76 respondents reported high ACE exposure having experienced three or more adverse childhood experiences. Only 7.4% comprising 23 respondents reported no adverse childhood experiences. The mean total ACE score was 1.8 with a standard deviation of 0.9, indicating substantial childhood trauma exposure among the prison population. These prevalence rates substantially exceed those reported in general population studies, aligning with international research demonstrating elevated ACE exposure among incarcerated populations (Crick et al., 2024; Ford et al., 2019). The high prevalence supports the

theoretical framework, particularly the Psychoanalytic Theory's emphasis on early childhood experiences shaping adult behavior patterns and the Social Learning Theory's focus on learned behaviors from adverse environments.

Table 12:

Descriptive Statistic of ACE

ACE Item	Never n(%)	Rarely n(%)	Sometimes n(%)	Often n(%)	Very Often n(%)	Any Exposure n(%)	Mean	SD
Emotional Abuse Items								
Swearing/insulting/humiliation	52(16.8)	67(21.7)	89(28.8)	73(23.6)	28(9.1)	257(83.2)	3.1	1.2
Threats of physical harm	78(25.2)	71(23.0)	82(26.5)	56(18.1)	22(7.1)	231(74.8)	2.8	1.3
Feeling unloved/unimportant	67(21.7)	58(18.8)	84(27.2)	67(21.7)	33(10.7)	242(78.3)	2.9	1.3
Family lack of closeness/support	89(28.8)	63(20.4)	78(25.2)	52(16.8)	27(8.7)	220(71.2)	2.5	1.3
Physical Abuse Items								
Pushing/grabbing/slapping	94(30.4)	58(18.8)	73(23.6)	61(19.7)	23(7.4)	215(69.6)	2.6	1.3
Hitting causing marks/injury	134(43.4)	52(16.8)	67(21.7)	41(13.3)	15(4.9)	175(56.6)	2.0	1.3
Witnessing domestic violence	156(50.5)	48(15.5)	58(18.8)	32(10.4)	15(4.9)	153(49.5)	1.9	1.2
Average								

Table 12 presents Descriptive Statistic of ACE. The data demonstrate significant variation in the prevalence and severity of specific adverse childhood experiences among the study population. Among emotional abuse items, verbal abuse through swearing, insulting, or humiliation was the most prevalent and severe experience, affecting 83.2% (257) of inmates with the highest mean score of 3.1 (SD = 1.2). Feeling unloved or unimportant affected 78.3% (242) of respondents with a

mean of 2.9 (SD = 1.3), while threats of physical harm impacted 74.8% (231) with a mean of 2.8 (SD = 1.3). These findings align with research by Li et al. (2020), which established strong correlations between childhood emotional abuse and subsequent behavioral problems among adolescents. The elevated prevalence of emotional abuse supports the theoretical propositions, particularly Psychoanalytic Theory's emphasis on how early emotional trauma disrupts ego development and impulse regulation mechanisms.

Among physical abuse experiences, pushing, grabbing, or slapping was most common, affecting 69.6% (215) of inmates with a mean score of 2.6 (SD = 1.3). Severe physical abuse resulting in marks or injuries affected 56.6% (175) of respondents, while witnessing domestic violence was reported by 49.5% (153) of participants. These physical abuse patterns correspond with findings from Watts and McNulty (2013), who demonstrated that childhood physical maltreatment serves as a significant predictor of delinquent behavior through the lens of General Strain Theory. The results support Social Learning Theory's proposition that exposure to violent behaviors during childhood creates learned patterns of aggression and conflict resolution that manifest in criminal behavior during adulthood.

Relationship Between Emotional Abuse and Criminal Behavior

This section presents findings related to the second objective of the study, which sought to establish the relationship between emotional abuse and criminal behavior among inmates in selected maximum-security prisons with Nairobi City County, Kenya.

Table 13:

Descriptive Statistics for Criminal Behaviour Assessment Scale

Criminal Behavior Item	N	Never n(%)	Rarely n(%)	Sometimes n(%)	Often n(%)	Very Often n(%)	Mean	SD
Property crimes (theft, burglary, vandalism)	309	89(28.8)	67(21.7)	78(25.2)	52(16.8)	23(7.4)	2.8	1.4
Violent behavior (assault, fighting)	309	45(14.6)	72(23.3)	89(28.8)	71(23.0)	32(10.4)	3.2	1.3
Drug-related offenses	309	134(43.4)	78(25.2)	56(18.1)	28(9.1)	13(4.2)	2.1	1.2
Fraud or financial crimes	309	156(50.5)	67(21.7)	52(16.8)	23(7.4)	11(3.6)	1.9	1.1
Gang-related activities	309	123(39.8)	71(23.0)	67(21.7)	34(11.0)	14(4.5)	2.3	1.3
Violated court orders/probation	309	98(31.7)	78(25.2)	71(23.0)	45(14.6)	17(5.5)	2.5	1.3
Carried weapons illegally	309	112(36.2)	63(20.4)	67(21.7)	48(15.5)	19(6.1)	2.6	1.4
Crimes under substance influence	309	108(35.0)	71(23.0)	72(23.3)	41(13.3)	17(5.5)	2.4	1.3
Planning criminal activities	309	87(28.2)	78(25.2)	82(26.5)	45(14.6)	17(5.5)	2.7	1.3
Acting as accomplice	309	78(25.2)	67(21.7)	89(28.8)	56(18.1)	19(6.1)	2.9	1.4

Total Criminal Behavior Score	309	25.4	7.8

Table 13 shows Descriptive Statistics for Criminal Behaviour Assessment Scale. The descriptive analysis reveals that violent behavior demonstrated the highest mean score (M = 3.2, SD = 1.3), with 33.4% of inmates reporting frequent engagement (often/very often). Property crimes showed the second highest mean (M = 2.8, SD = 1.4), while fraud or financial crimes demonstrated the lowest engagement levels (M = 1.9, SD = 1.1). The total criminal behavior score averaged 25.4 (SD = 7.8), indicating moderate levels of criminal engagement across the assessed behaviors. These patterns align with the maximum-security classification of the study facilities, which typically house individuals convicted of serious offenses requiring heightened security measures.

Table 14:

Pearson Correlation between Emotional Abuse and Criminal Behaviour

		Emotional Abuse	Criminal Behavior
Emotional Abuse	Correlation	1.000	
	Sig. (2-tailed)		
	N	309	
Criminal Behavior	Correlation	.452**	1.000
	Sig. (2-tailed)	.000	
	N	309	309

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

Table 14 presents Pearson Correlation between Emotional Abuse and Criminal Behaviour. The correlation analysis reveals a moderate positive relationship between emotional abuse and criminal behavior ($r = .452$, $p < .001$), indicating that higher levels of childhood emotional abuse are significantly associated with increased criminal behavior among inmates. The correlation coefficient suggests that emotional abuse accounts for approximately 20.4% of the variance in criminal behavior scores. This relationship is statistically significant at the $p < .001$ level, demonstrating a robust association between these variables. These findings align with the Social Learning Theory's proposition that individuals learn maladaptive behavioral patterns through exposure to hostile emotional environments during childhood. The moderate correlation strength is consistent with research by Li et al. (2020), who established significant correlations between childhood emotional abuse and behavioral problems among adolescents. The results also support Psychoanalytic Theory's emphasis on how early emotional trauma disrupts psychological development and impulse regulation mechanisms, consistent with findings from Caravaca-Sánchez et al. (2019) regarding elevated behavioral difficulties among individuals with adverse childhood experiences. The statistical significance and effect size demonstrate that emotional abuse represents a meaningful predictor of criminal behavior patterns among incarcerated populations.

Relationship between Physical Abuse and Criminal Behavior

This section presents findings related to the third objective of the study, which sought to examine the relationship between physical abuse and criminal behavior among inmates in selected maximum-security prisons.

Table 15:

Pearson Correlation between Physical Abuse and Criminal Behaviour

		Physical Abuse	Criminal Behavior
Physical Abuse	Correlation	1.000	
	Sig. (2-tailed)		
	N	309	
Criminal Behavior	Correlation	.389**	1.000
	Sig. (2-tailed)	.000	
	N	309	309

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

Table 15 presents Pearson Correlation between Physical Abuse and Criminal Behaviour. The correlation analysis reveals a moderate positive relationship between physical abuse and criminal behavior ($r = .389$, $p < .001$), indicating that higher levels of childhood physical abuse are significantly associated with increased criminal behavior among inmates. The correlation coefficient suggests that physical abuse accounts for approximately 15.1% of the variance in criminal behavior scores. This relationship is statistically significant at the $p < .001$ level, demonstrating a substantial association between these variables.

The findings particularly align with the Social Learning Theory's proposition that individuals learn aggressive behavioral patterns through exposure to violence

during childhood. The moderate correlation strength is consistent with research by Watts and McNulty (2013), who demonstrated that childhood physical maltreatment serves as a significant predictor of delinquent behavior through General Strain Theory mechanisms. The results also support findings from Peng et al. (2022), who established correlations between childhood physical abuse and aggressive behaviors among Chinese adolescents.

Strategies Used to Help Inmates Cope with Adverse Childhood Experiences

This section presents findings related to the fourth objective of the study, which sought to evaluate institutional strategies used to support inmates in coping with adverse childhood experiences in selected maximum-security prisons in Nairobi City County, Kenya. Data for this objective was collected through semi-structured interviews with 30 key informants comprising prison counsellors, wardens, and probation officers who were directly involved in inmate rehabilitation and institutional support programs within the two selected facilities. Table 16 presents the descriptive statistics for the Brief COPE Inventory administered to inmates to assess the coping strategies they personally employed in dealing with their adverse childhood experience histories within the prison setting.

Table 16:

Descriptive Statistics for Brief COPE Inventory

Coping Strategy	I don't do this at all n(%)	I do this a little bit n(%)	I do this a medium amount n(%)	I do this a lot n(%)	Mean	SD
Turn to work or activities	78(25.2)	92(29.8)	89(28.8)	50(16.2)	2.4	1.0
Concentrate efforts on situation	67(21.7)	98(31.7)	94(30.4)	50(16.2)	2.4	1.0

Say "this isn't real"	156(50.5)	89(28.8)	45(14.6)	19(6.1)	1.8	0.9
Use alcohol or drugs	201(65.0)	67(21.7)	28(9.1)	13(4.2)	1.5	0.8
Get emotional support	89(28.8)	78(25.2)	94(30.4)	48(15.5)	2.3	1.1
Give up trying	134(43.4)	98(31.7)	56(18.1)	21(6.8)	1.9	0.9
Take action to improve situation	45(14.6)	89(28.8)	98(31.7)	77(24.9)	2.7	1.0
Refuse to believe it happened	178(57.6)	78(25.2)	34(11.0)	19(6.1)	1.7	0.9
Express unpleasant feelings	98(31.7)	89(28.8)	78(25.2)	44(14.2)	2.2	1.1
Get help and advice	67(21.7)	94(30.4)	89(28.8)	59(19.1)	2.5	1.0
Use alcohol/drugs to get through	189(61.2)	78(25.2)	28(9.1)	14(4.5)	1.6	0.8
Try to see in different light	56(18.1)	89(28.8)	98(31.7)	66(21.4)	2.6	1.0
Criticize myself	78(25.2)	94(30.4)	89(28.8)	48(15.5)	2.3	1.0
Try to come up with strategy	34(11.0)	78(25.2)	98(31.7)	99(32.0)	2.8	1.0
Get comfort from someone	78(25.2)	89(28.8)	94(30.4)	48(15.5)	2.4	1.0
Give up attempt to cope	167(54.0)	89(28.8)	34(11.0)	19(6.1)	1.7	0.9
Look for something good	67(21.7)	78(25.2)	94(30.4)	70(22.7)	2.5	1.1
Make jokes about it	123(39.8)	89(28.8)	67(21.7)	30(9.7)	2.0	1.0
Do something to think less	89(28.8)	78(25.2)	94(30.4)	48(15.5)	2.3	1.1
Accept the reality	45(14.6)	67(21.7)	98(31.7)	99(32.0)	2.8	1.0
Express negative feelings	98(31.7)	89(28.8)	78(25.2)	44(14.2)	2.2	1.1
Find comfort in religion	34(11.0)	56(18.1)	89(28.8)	130(42.1)	3.0	1.0
Get advice from others	67(21.7)	89(28.8)	94(30.4)	59(19.1)	2.5	1.0
Learn to live with it	23(7.4)	56(18.1)	98(31.7)	132(42.7)	3.1	0.9
Think about steps to take	45(14.6)	78(25.2)	94(30.4)	92(29.8)	2.8	1.0
Blame myself	134(43.4)	89(28.8)	56(18.1)	30(9.7)	1.9	1.0
Pray or meditate	34(11.0)	45(14.6)	78(25.2)	152(49.2)	3.1	1.0
Make fun of situation	156(50.5)	89(28.8)	45(14.6)	19(6.1)	1.8	0.9

Table 16 presents the descriptive statistics for the Brief COPE Inventory administered to inmates. The findings reveal distinct patterns in personal coping strategy utilization among inmates with adverse childhood experience histories. Religious and acceptance-based coping strategies demonstrated the highest utilization rates among inmates, with pray or meditate receiving a mean score of 3.1 with a

standard deviation of 1.0 and learn to live with it receiving a mean score of 3.1 with a standard deviation of 0.9 as the most frequently utilized coping strategies. These were followed by problem-focused strategies including try to come up with strategy at a mean of 2.8, accept the reality at a mean of 2.8, and think about steps to take at a mean of 2.8, all with a standard deviation of 1.0.

Active coping approaches showed moderate utilization among inmates, with take action to improve situation receiving a mean of 2.7 with a standard deviation of 1.0 and try to see in a different light receiving a mean of 2.6 with a standard deviation of 1.0. Social support seeking strategies displayed moderate usage patterns including get help and advice at a mean of 2.5, get advice from others at a mean of 2.5, and look for something good at a mean of 2.5. Maladaptive coping strategies showed consistently low utilization rates among the inmate population, with substance use coping demonstrating minimal engagement as use alcohol or drugs received the lowest mean score of 1.5 with a standard deviation of 0.8 and use alcohol or drugs to get through receiving a similarly low mean of 1.6 with a standard deviation of 0.8.

Avoidance strategies including refuse to believe it happened at a mean of 1.7, give up attempt to cope at a mean of 1.7, and denial-based coping at a mean of 1.8 also showed limited utilization among inmates. Emotional expression strategies displayed moderate engagement levels with express unpleasant feelings and express negative feelings both receiving means of 2.2, while self-blame demonstrated relatively low usage at a mean of 1.9 and humor-based coping showed minimal engagement with make jokes about it at a mean of 2.0 and make fun of situation at a mean of 1.8. These

findings reveal that inmates predominantly employed religious and acceptance-based personal coping strategies in dealing with their adverse childhood experience histories, while maladaptive coping strategies were least utilized among the study population.

Available Institutional Strategies

Key informants identified a range of institutional strategies currently available within the selected maximum-security prisons to support inmates in coping with their adverse childhood experience histories. Prison counsellor R002 reported that primary institutional interventions included *self-awareness programs with NGOs and anger management* sessions as the main strategies offered to inmates. Prison warden R010 detailed a broader set of programs, noting that *anger management, stress management, strategies to let out anger, communication skills, interpersonal skills and self-awareness* were all available as institutional programs within the facilities. Prison counsellor R016 highlighted the availability of spiritual and psychosocial interventions, emphasizing *spiritual guiding and counseling, peer educators, trauma classes, mentorship classes and resource center for both remandees and inmates* as key institutional offerings. Probation officer R023 further identified *guidance and counseling, mentorship, spiritual counseling, re-integration and prayer or divine intervention* as the primary institutional strategies available to support inmates within the selected prisons.

Effectiveness of Institutional Strategies

Key informants provided professional assessments of the effectiveness of the institutional strategies in supporting inmates with adverse childhood experience histories. Prison counsellor R012 noted that the primary benefits of the available strategies were *change in way of seeing things through perspective shifts and rehabilitation* among participating inmates. Probation officer R021 observed that the institutional programs *help reduce violent incidents and improve inmate-staff relationships and lower recidivism by addressing the root causes of criminal behaviour and promote rehabilitation over punishment* within the correctional facilities. Prison warden R027 reported positive behavioral outcomes among inmates who engaged with the available programs, stating *we have seen the victims change and become good inmates* as evidence of program effectiveness. Prison counsellor R014 further emphasized the empowerment dimension of the strategies, reporting that the programs *reduce recidivism and help empower inmates with knowledge and skills to help them outside to cater for their needs and others* upon release from the correctional facilities.

Barriers to Effective Institutional Support

Key informants identified several barriers that significantly limited the effectiveness of institutional strategies in supporting inmates with adverse childhood experience histories within the selected maximum-security prisons. Regarding resource-related barriers, prison counsellor R009 emphasized *financial constraint, limited resources, protocol and inadequate training skills* as primary challenges to effective institutional support delivery within the facilities. Concerning environmental barriers, probation officer R018 noted that *lack of privacy, constant surveillance and*

threat of violence can trigger fight or flight responses in trauma survivors while *stigma and mistrust whereby inmates become reluctant to disclose trauma due to shame, fear or judgement* further undermined the effectiveness of available institutional support programs. Prison counsellor R005 identified institutional training barriers, explaining that *lack of trauma training without proper training could emerge misinterpretation of trauma related behaviours such as withdrawal as manipulation* and that *environmental triggers within the prison environment* posed significant challenges to effective trauma-informed support delivery.

Prison warden R007 highlighted relational barriers within the institutional context, noting that *lack of trust, lack of a safe space and resistance to therapy* among inmates significantly limited engagement with available institutional support programs. Probation officer R024 further identified reconciliation-related barriers, observing that *resistance and lack of reconciliation with family members not ready to forgive for crime* undermined inmates' willingness to engage with institutional support strategies. Prison counsellor R015 identified operational challenges including *interruptions during sessions and inmates not ready to open up or not feeling safe* as factors that consistently undermined the delivery of effective institutional support within the selected maximum-security prison facilities.

The findings collectively reveal that while a range of institutional strategies exist within the selected maximum-security prisons to support inmates in coping with adverse childhood experiences, these strategies face significant implementation challenges that limit their overall effectiveness. The identified resource constraints,

environmental barriers, and inadequate trauma-informed training among staff are consistent with literature highlighting the need for systematic reform in correctional mental health services to better address the trauma-related needs of incarcerated populations (Kalia and Knauft, 2020). The barriers identified support existing research indicating that correctional environments require fundamental shifts toward trauma-informed care models to effectively address the rehabilitation needs of inmates with significant childhood adversity histories (Hampton-Anderson et al., 2021).

Interpretation of Findings

The interpretation of findings is presented per objective.

Prevalence and Predominant Types of Adverse Childhood Experiences among Inmates

The findings revealed that the overall prevalence of adverse childhood experiences among inmates in the selected maximum-security prisons was 92.6%, with verbal abuse through swearing, insulting, and humiliation being the predominant type of adverse childhood experience affecting 83.2% of the study population. This extremely high prevalence rate indicates that childhood adversity is a near-universal characteristic of the maximum-security prison population studied, suggesting that the vast majority of inmates in Kenya's selected correctional facilities entered adulthood already carrying significant unresolved psychological burdens resulting from their childhood adversity histories. The predominance of emotional abuse over physical abuse among the study population indicates that psychological maltreatment during childhood represents a more pervasive form of adversity among Kenya's incarcerated

population than direct physical violence, with important implications for the design of targeted institutional rehabilitation interventions.

The finding that 24.6% of inmates reported high ACE exposure having experienced three or more adverse childhood experiences is particularly concerning, as research consistently demonstrates that cumulative ACE exposure produces exponentially greater risks of negative behavioral outcomes including criminal conduct compared to exposure to a single ACE type. The distribution of ACE exposure across the low, moderate, and high categories indicates that childhood adversity among Kenya's maximum-security prison population is not concentrated among a small subgroup but is broadly distributed across the majority of the incarcerated population studied.

Relationship between Emotional Abuse and Criminal Behavior

The finding of a moderate positive correlation between childhood emotional abuse and criminal behavior at r equals 0.452 with a significance level of p less than 0.001 indicates that childhood emotional abuse is a statistically significant and practically meaningful predictor of criminal behavioral outcomes among inmates in the selected maximum-security prisons. The correlation coefficient of 0.452 places this relationship in the moderate range, indicating that while emotional abuse is a significant contributor to criminal behavior, it operates alongside other factors in determining criminal behavioral outcomes among the study population. The finding that emotional abuse accounts for approximately 20.4% of the variance in criminal behavior scores is particularly significant, as it demonstrates that nearly one fifth of the variation in

criminal behavioral patterns among inmates can be directly attributed to their childhood emotional abuse histories.

The descriptive statistics for the Criminal Behaviour Assessment Scale revealed that violent behavior demonstrated the highest mean score of 3.2 among all criminal behavior items assessed, with 33.4% of inmates reporting frequent engagement in violent behavior. This pattern of violent behavior being the most prevalent criminal behavioral manifestation is consistent with the theoretical proposition that emotional abuse during childhood creates profound emotional dysregulation and impulse control deficits that manifest most strongly as violent behavioral responses in adulthood. The association between emotional abuse and violent behavior among the study population indicates that the psychological harm inflicted through childhood emotional maltreatment has lasting consequences for behavioral regulation that persist into adulthood and contribute significantly to the violent criminal conduct characteristic of maximum-security prison populations in Kenya.

Relationship between Physical Abuse and Criminal Behavior

The finding of a moderate positive correlation between childhood physical abuse and criminal behavior at r equals 0.389 with a significance level of p less than 0.001 indicates that childhood physical abuse is a statistically significant predictor of criminal behavioral outcomes among inmates in the selected maximum-security prisons, though its predictive strength is slightly weaker than that of emotional abuse. The correlation coefficient of 0.389 suggests that physical abuse accounts for approximately 15.1% of the variance in criminal behavior scores, indicating that

childhood physical victimization makes a substantial and independent contribution to criminal behavioral patterns among the study population. The slightly weaker correlation compared to emotional abuse suggests that physical abuse and emotional abuse operate through partially distinct psychological and behavioral pathways to influence criminal outcomes, with physical abuse primarily creating learned aggressive behavioral patterns while emotional abuse produces broader psychological dysregulation.

The distribution of offense types among the study population, with violent offenses comprising the largest proportion at 46.0% of all crimes committed by the inmates, is consistent with the theoretical proposition that childhood physical abuse creates learned behavioral patterns of aggression and violence that subsequently manifest as violent criminal conduct in adulthood. The finding that inmates who experienced higher levels of physical abuse during childhood were more likely to be convicted of violent offenses supports the cycle of violence hypothesis, which proposes that childhood exposure to physical violence normalizes aggression as an acceptable means of conflict resolution that is subsequently replicated in adult interpersonal interactions including those that result in violent criminal offending within the Kenyan maximum-security prison context.

Institutional Strategies Used to Support Inmates in Coping with Adverse Childhood Experiences

The findings from the Brief COPE Inventory revealed that inmates predominantly employed religious and acceptance-based personal coping strategies in

managing their adverse childhood experience histories, with pray or meditate and learn to live with it both receiving the highest mean utilization scores of 3.1. This pattern of coping strategy utilization indicates that in the absence of adequate trauma-informed institutional support, inmates in Kenya's maximum-security prisons largely turn to spiritual and acceptance-based approaches as their primary means of managing the psychological burden of their childhood adversity histories. The low utilization of maladaptive coping strategies such as substance use at a mean of 1.5 and denial at a mean of 1.7 suggests that despite the significant trauma histories of the study population, inmates were not predominantly relying on the most harmful coping mechanisms available to them within the correctional setting.

The qualitative findings from key informants revealed that while a range of institutional strategies existed within the selected maximum-security prisons including counselling, anger management, mentorship, and spiritual guidance, these strategies faced significant implementation challenges that limited their overall effectiveness in supporting inmates with adverse childhood experience histories. The identification of resource constraints, inadequate trauma-informed training among staff, and environmental barriers as the primary challenges to effective institutional support indicates that the current institutional response to the high prevalence of adverse childhood experiences among inmates in Kenya's maximum-security prisons is fundamentally inadequate. The gap between the 92.6% ACE prevalence among inmates and the limited availability of specialized trauma-informed institutional support

represents a critical deficit in Kenya's correctional rehabilitation system that urgently requires systematic policy reform and investment.

Discussion of Findings

The discussion of findings is presented per objective.

Prevalence and Predominant Types of Adverse Childhood Experiences among Inmates

The present study established that 92.6% of inmates in the selected maximum-security prisons in Nairobi City County experienced at least one adverse childhood experience, with verbal abuse through swearing, insulting, and humiliation being the predominant ACE type affecting 83.2% of the study population. This finding is consistent with international research demonstrating elevated ACE prevalence among incarcerated populations. Ford et al. (2020) found that 84.2% of male inmates in Wales experienced at least one ACE, while Crick et al. (2024) established similarly high ACE rates among inmates in southern state prisons in the United States. The prevalence rate established in the present study exceeds these international findings, suggesting that inmates in Kenya's maximum-security prisons carry a particularly heavy burden of childhood adversity that may reflect broader socioeconomic challenges, cultural factors, and systemic weaknesses in child protection within the Kenyan context.

The predominance of emotional abuse over physical abuse among the study population is consistent with findings from Umpunjun et al. (2024), whose systematic review and meta-analysis of ACE prevalence among incarcerated males established that emotional neglect and psychological maltreatment were among the most prevalent ACE

types across diverse international prison populations. The finding that verbal abuse and humiliation was the single most prevalent specific ACE item among the study population aligns with research by Cui and Liu (2018), who established through a meta-analysis of 42 studies involving 98,749 children that emotional abuse demonstrated the strongest correlation with behavioral problems among affected individuals. The elevated prevalence of emotional abuse among the study population supports the Psychoanalytic Theory's proposition that early emotional trauma stored in the unconscious continues to influence behavior throughout life, manifesting as the criminal behavioral patterns observed among inmates in the selected maximum-security prisons.

The finding that 24.6% of inmates reported high ACE exposure is consistent with research by Takahashi et al. (2022), who found that 76.1% of incarcerated methamphetamine addicts in Japan experienced ACEs before age eighteen, with cumulative ACE exposure being strongly associated with negative behavioral outcomes. Locally, Muriuki (2017) confirmed significant childhood trauma histories among female inmates at Langata Women's Maximum Security Prison, while Njuguna (2026) established that trauma exposure was the most powerful predictor of criminal involvement among youth offenders in Nairobi. These local findings corroborate the present study's conclusion that adverse childhood experiences are highly prevalent among Kenya's incarcerated population and that emotional and physical abuse represent the predominant ACE types experienced by inmates in the country's maximum-security correctional facilities.

Relationship between Emotional Abuse and Criminal Behavior

The present study established a moderate positive correlation between childhood emotional abuse and criminal behavior at r equals 0.452 with a significance level of p less than 0.001, indicating that higher levels of childhood emotional abuse were significantly associated with increased criminal behavior among inmates. This finding is consistent with research by Li et al. (2020), who established strong correlations between childhood emotional abuse and behavioral problems among adolescents in China, demonstrating that emotionally abused children were significantly more likely to develop deviant peer associations and depressive symptoms that increased their criminal risk trajectories. The correlation coefficient of 0.452 established in the present study falls within the moderate range reported across international studies examining the relationship between emotional abuse and behavioral outcomes, confirming that this relationship is robust and consistent across diverse cultural and institutional contexts including Kenya's maximum-security prison settings.

The finding that emotional abuse accounted for approximately 20.4% of the variance in criminal behavior scores is consistent with research by Zavala and Guadalupe-Diaz (2018), who demonstrated that emotional abuse victimization was strongly predicted by strain-related characteristics, suggesting that the psychological burden of emotional abuse creates significant pathways toward antisocial and criminal behavioral responses. Basto-Pereira et al. (2022) further corroborated this finding through their cross-continental study across ten countries, establishing that emotional

violence during childhood was significantly associated with all criminal outcomes examined among male participants globally. The present study's finding extends this international evidence to the Kenyan maximum-security prison context, confirming that the relationship between childhood emotional abuse and adult criminal behavior is not limited to Western or high-income country contexts but is equally relevant and significant within the African correctional setting studied.

The significant relationship between emotional abuse and criminal behavior established in the present study is well explained by both theoretical frameworks underpinning the study. From the Psychoanalytic Theory perspective, Fenichel (2014) established that emotional abuse during childhood damages ego development, leading to poor impulse control and increased likelihood of criminal behavioral responses in adulthood, consistent with the moderate positive correlation established in the present study. From the Social Learning Theory perspective, Rotter (2021) demonstrated that emotional abuse exposes children to negative behavioral models that they subsequently imitate in later life, increasing their likelihood of engaging in criminal conduct as adults. Locally, Njuguna (2026) corroborated this finding by establishing that emotional victimization was the most powerful predictor of criminal involvement among youth offenders in Nairobi, confirming the relevance of this relationship within the Kenyan criminal justice context.

Relationship between Physical Abuse and Criminal Behavior

The present study established a moderate positive correlation between childhood physical abuse and criminal behavior at r equals 0.389 with a significance

level of p less than 0.001, indicating that higher levels of childhood physical abuse were significantly associated with increased criminal behavior among inmates in the selected maximum-security prisons. This finding is consistent with research by Watts and McNulty (2013), who demonstrated through the lens of General Strain Theory that early childhood physical maltreatment was a significant predictor of teenage delinquency in both genders, with depressive symptoms mediating the impact of childhood physical abuse on criminal behavior. The slightly weaker correlation between physical abuse and criminal behavior compared to emotional abuse is consistent with findings from Basto-Pereira et al. (2022), who established that while physical abuse was significantly associated with criminal outcomes globally, emotional violence demonstrated stronger and more consistent associations with all criminal behavioral outcomes examined across their ten-country cross-continental study.

The finding that physical abuse accounted for approximately 15.1% of the variance in criminal behavior scores is consistent with research by Peng et al. (2022), who established that childhood physical abuse significantly impacted behavioral outcomes among Chinese teenagers, with aggression serving as the strongest mediating factor between physical abuse and behavioral difficulties. This finding supports the cycle of violence hypothesis prominent in criminological literature, which proposes that exposure to physical violence during childhood teaches maladaptive conflict resolution strategies and normalizes aggressive behavior as an acceptable response to stress or frustration that subsequently manifests as violent criminal conduct in adulthood. The predominance of violent offenses at 46.0% among the study population further

corroborates this theoretical proposition, suggesting a clear developmental pathway from childhood physical victimization to adult violent criminal behavior among inmates in Kenya's maximum-security prisons.

The relationship between physical abuse and criminal behavior established in the present study is corroborated by regional and local evidence from African contexts. Naidoo et al. (2024) established among female inmates in South Africa that childhood physical victimization was strongly associated with subsequent violent offending, supporting the cycle of violence theory within the African correctional context. The Ministry of Labour and Social Protection of Kenya (2019) further corroborated this finding through their national Violence Against Children survey, which reported that 62.6% of Kenyan respondents had experienced multiple incidents of physical abuse before the age of eighteen, establishing that childhood physical abuse is a widespread and significant risk factor for negative behavioral outcomes within the Kenyan context. These regional and local findings collectively confirm that the relationship between childhood physical abuse and adult criminal behavior established in the present study is consistent with the broader African and Kenyan evidence base on this critical relationship.

Institutional Strategies Used to Support Inmates in Coping with Adverse Childhood Experiences

The present study established that inmates in the selected maximum-security prisons predominantly employed religious and acceptance-based personal coping strategies, with prayer and meditation and learning to live with adversity receiving the

highest mean utilization scores of 3.1, while institutional strategies available within the selected facilities faced significant implementation challenges including resource constraints, inadequate trauma-informed training, and environmental barriers. The high reliance on religious coping among inmates is consistent with research by Hampton-Anderson et al. (2021), who identified spiritual practices as important cultural assets for trauma recovery among marginalized populations, noting that religious coping provides meaning-making frameworks, social support networks, and emotional regulation strategies that help manage the psychological impact of childhood trauma. The present study corroborates this finding within the Kenyan correctional context, confirming that religious coping is the most culturally embedded and widely utilized personal coping strategy among inmates with adverse childhood experience histories.

The finding that current institutional strategies within the selected maximum-security prisons were predominantly general rather than trauma-specific is consistent with research by Coelho et al. (2025), who established through a systematic review that most correctional institutions globally fail to provide comprehensive trauma-specific interventions that directly address the adverse childhood experiences underlying criminal behavioral patterns among their inmate populations. Miller and Najavits (2012) corroborated this finding by demonstrating that trauma-specific institutional interventions have been found to be more powerful than general trauma-informed approaches alone, suggesting that the predominantly general nature of institutional strategies within the selected Kenyan prisons significantly limits their effectiveness in supporting inmates with significant adverse childhood experience histories.

The barriers to effective institutional support identified in the present study, including resource constraints, inadequate trauma-informed training among staff, and environmental challenges, are consistent with findings from Gaber et al. (2025), who established through a scoping review that implementation of trauma-informed care in correctional facilities was consistently challenged by inadequate staff training, insufficient institutional resources, and correctional cultures focused on risk management rather than rehabilitation. Locally, Mutia (2025) corroborated these findings by establishing that while psychosocial support programs existed within prisons in Nairobi City County, resource constraints significantly limited their effectiveness in addressing the underlying trauma histories of inmates. Otieno (2018) further confirmed at the local level that only 18.8% of rehabilitation programs within Kenyan prisons focused on psychological needs, with prison staff lacking training in trauma-informed practices, collectively underscoring the urgent need for systematic reform of institutional support strategies within Kenya's maximum-security correctional system.

Chapter Summary

This chapter has presented the findings of the study on the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. The results show a high prevalence of adverse childhood experiences, with 92.6% of respondents reporting at least one ACE. Specifically, 25.2% of respondents reported low ACE exposure, 42.7% reported moderate ACE exposure, and 24.6% reported high ACE

exposure. Verbal abuse through swearing, insulting, and humiliation was identified as the predominant type of adverse childhood experience, affecting 83.2% of inmates, while pushing, grabbing, and slapping was the most prevalent physical abuse item, affecting 69.6% of respondents.

Correlation analyses demonstrated significant positive relationships between emotional abuse and criminal behavior with a correlation coefficient of 0.452 at a significance level of p less than 0.001, and between physical abuse and criminal behavior with a correlation coefficient of 0.389 at a significance level of p less than 0.001. The assessment of personal coping strategies showed that inmates predominantly employed religious and acceptance-based approaches, with prayer and meditation and learning to live with it both receiving the highest utilization mean scores of 3.1. Qualitative findings from key informants revealed that institutional strategies available within the selected maximum-security prisons included counselling, anger management, mentorship, spiritual guidance, and trauma classes, with key informants identifying resource constraints, inadequate trauma-informed training among staff, and environmental barriers as the primary challenges limiting the effectiveness of these institutional support strategies. These findings highlight the critical role of childhood trauma in criminal behavior pathways and the urgent need for comprehensive trauma-informed institutional rehabilitation approaches within Kenya's correctional system. The next chapter presents the summary of findings, conclusions, and recommendations of the study.

CHAPTER FIVE

SUMMARY OF FINDINGS, IMPLICATIONS, CONCLUSIONS, RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

Introduction

The chapter presents a comprehensive summary of the study findings, implications of the findings in light of the theoretical and conceptual framework provided in Chapter Two, conclusions drawn from the research explaining the extent to which the research questions have been answered, and recommendations for policy and practice drawn from the findings. The chapter further proposes areas for further research based on the investigation of the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. The chapter is organized according to the study objectives.

Summary of the Results

The study aimed to determine the prevalence and predominant types of adverse childhood experiences among inmates, establish the relationship between childhood emotional abuse and criminal behavior, examine the relationship between childhood physical abuse and criminal behavior, and evaluate institutional strategies used to support inmates in coping with adverse childhood experiences in selected maximum-security prisons in Nairobi City County, Kenya. The study achieved an inmate response rate of 88.0% with 309 out of 351 questionnaires returned, and a key

informant response rate of 100% with all 30 key informants completing their interviews. Among inmate respondents, 82.5% were male and 17.5% were female. The majority of respondents at 42.7% were aged 26 to 35 years, while 28.2% were aged 18 to 25 years. Regarding education levels, 43.4% had completed primary education, 31.7% secondary education, and 14.6% had no formal education.

Prevalence and Predominant Types of Adverse Childhood Experiences

Results for the first objective revealed that the overall prevalence of adverse childhood experiences among inmates in the selected maximum-security prisons was 92.6%, with 286 out of 309 respondents reporting at least one adverse childhood experience. Specifically, 25.2% of respondents reported low ACE exposure, 42.7% reported moderate ACE exposure, and 24.6% reported high ACE exposure, while only 7.4% reported no adverse childhood experiences. The mean total ACE score was 1.8 with a standard deviation of 0.9, indicating substantial childhood trauma exposure among the prison population. The predominant types of adverse childhood experiences identified were emotional abuse items, with verbal abuse through swearing, insulting, and humiliation being the most prevalent ACE type affecting 83.2% of inmates, followed by feeling unloved or unimportant affecting 78.3%, and threats of physical harm affecting 74.8%. Among physical abuse items, pushing, grabbing, or slapping was most prevalent affecting 69.6% of inmates, followed by hitting causing marks or injury affecting 56.6%, and witnessing domestic violence affecting 49.5%.

Relationship between Emotional Abuse and Criminal Behavior

Results for the second objective demonstrated a moderate positive correlation between childhood emotional abuse and criminal behavior with a correlation coefficient of 0.452 at a significance level of p less than 0.001, with emotional abuse accounting for approximately 20.4% of the variance in criminal behavior scores. This relationship was statistically significant at the p less than 0.001 level, indicating that higher levels of childhood emotional abuse were significantly associated with increased criminal behavior among inmates in the selected maximum-security prisons. The correlation strength was consistent with theoretical propositions from both the Psychoanalytic Theory and the Social Learning Theory regarding the impact of early emotional trauma on adult behavioral patterns, with the Psychoanalytic Theory explaining how emotional abuse disrupts ego development and the Social Learning Theory explaining how emotionally abusive environments provide maladaptive behavioral models that are subsequently imitated in adulthood.

Relationship between Physical Abuse and Criminal Behavior

Results for the third objective revealed a moderate positive correlation between childhood physical abuse and criminal behavior with a correlation coefficient of 0.389 at a significance level of p less than 0.001, with physical abuse accounting for approximately 15.1% of the variance in criminal behavior scores. This relationship was statistically significant, demonstrating that higher levels of childhood physical abuse were significantly associated with increased criminal behavior among inmates in the selected maximum-security prisons. While slightly weaker than the emotional

abuse correlation, the physical abuse relationship remained substantial and supported the cycle of violence hypothesis prevalent in criminological literature, which proposes that children exposed to physical violence during childhood are more likely to perpetrate violence in adulthood through learned behavioral patterns acquired through observation and reinforcement of violent behaviors within their childhood environments.

Institutional Strategies Used to Support Inmates in Coping with Adverse Childhood Experiences

Results for the fourth objective revealed that the selected maximum-security prisons offered a range of institutional strategies to support inmates in coping with their adverse childhood experience histories, including counselling services, anger management programs, stress management sessions, mentorship programs, spiritual guidance, peer education, trauma classes, and reintegration programs. Regarding the personal coping strategies employed by inmates themselves, religious and acceptance-based approaches were most commonly utilized, with prayer and meditation and learning to live with adversity both receiving the highest mean scores of 3.1. Problem-focused strategies including developing strategies at a mean of 2.8 and taking action to improve situations at a mean of 2.7 showed moderate utilization, while maladaptive coping strategies such as substance use at a mean of 1.5 and denial at a mean of 1.7 demonstrated minimal engagement. Key informants identified resource constraints, inadequate trauma-informed training among staff, and environmental barriers as the primary challenges limiting the effectiveness of institutional strategies in supporting

inmates with adverse childhood experience histories within the selected maximum-security prisons.

Implications of the Findings

The findings of this study have significant implications for theory, policy, and practice in understanding the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. The implications are presented per objective in light of the Psychoanalytic Theory and Social Learning Theory that formed the theoretical foundation of the study.

Implications of the Prevalence and Predominant Types of Adverse Childhood Experiences among Inmates

The finding that 92.6% of inmates experienced at least one adverse childhood experience, with verbal abuse and humiliation being the predominant ACE type, has significant theoretical implications for understanding criminal behavior among incarcerated populations in Kenya. From the Psychoanalytic Theory perspective, this high prevalence confirms the theory's fundamental proposition that early childhood experiences stored in the unconscious continue to influence behavior throughout life, suggesting that the majority of inmates in Kenya's maximum-security prisons carry significant unresolved unconscious psychological conflicts rooted in their childhood adversity histories that manifest as criminal behavioral patterns in adulthood (Fenichel, 2014). This finding implies that correctional rehabilitation programs in

Kenya must move beyond surface-level behavioral interventions to address the deeper psychological roots of criminal conduct among inmates.

From the Social Learning Theory perspective, the high prevalence of emotional and physical abuse among inmates confirms the theory's proposition that children raised in abusive environments are exposed to maladaptive behavioral models that they subsequently learn, imitate, and internalize as behavioral norms (Bandura, 1977). The predominance of verbal abuse and humiliation as the most prevalent ACE type implies that a significant proportion of Kenya's maximum-security prison population grew up in environments where hostile and demeaning interpersonal communication was normalized, creating learned behavioral patterns of aggression and hostility that contributed to their criminal involvement. This has practical implications for the design of institutional rehabilitation programs that must address the specific learned behavioral patterns associated with the predominant ACE types identified among the inmate population.

Implications of the Relationship between Emotional Abuse and Criminal Behavior

The finding of a moderate positive correlation between childhood emotional abuse and criminal behavior at r equals 0.452 with p less than 0.001 has important theoretical and practical implications for understanding and addressing criminal behavior among inmates in Kenya's maximum-security prisons. From the Psychoanalytic Theory perspective, this finding confirms the theory's proposition that emotional abuse during childhood damages ego development and reduces the superego's capacity to provide internal moral restraint, creating unconscious impulses

that manifest as criminal behavioral responses in adulthood (Guntrip, 2008). This implies that therapeutic interventions within correctional settings must address the unconscious psychological consequences of childhood emotional abuse to effectively rehabilitate inmates and reduce the likelihood of reoffending upon release from the selected maximum-security prison facilities.

From the Social Learning Theory perspective, the significant relationship between emotional abuse and criminal behavior confirms that children exposed to emotionally abusive environments learn maladaptive behavioral patterns including aggression, hostility, and antisocial conduct through observation and imitation of their abusers (Rotter, 2021). This finding implies that correctional rehabilitation programs must specifically target the learned behavioral patterns associated with emotional abuse histories among inmates, providing alternative behavioral models and reinforcing prosocial behavioral responses through structured institutional programs. The practical implication is that prison counsellors, wardens, and probation officers within Kenya's maximum-security prisons must receive specialized training in identifying and addressing the behavioral consequences of childhood emotional abuse among the inmates under their care.

Implications of the Relationship between Physical Abuse and Criminal Behavior

The finding of a moderate positive correlation between childhood physical abuse and criminal behavior at r equals 0.389 with p less than 0.001 has significant implications for understanding the developmental pathways through which physical victimization during childhood contributes to adult criminal conduct among inmates

in Kenya's maximum-security prisons. From the Psychoanalytic Theory perspective, this finding confirms the theory's proposition that physical abuse creates unconscious aggression stored within the id that manifests as violent criminal behavior when the weakened ego fails to contain these primitive impulses and the underdeveloped superego fails to provide adequate moral restraint (Fenichel, 2014). This implies that correctional interventions for inmates with physical abuse histories must address both the unconscious aggressive impulses and the weakened impulse regulation capacities that result from childhood physical victimization.

From the Social Learning Theory perspective, the significant relationship between physical abuse and criminal behavior confirms Bandura's proposition that children who witness or directly experience physical violence learn that aggression is an acceptable and effective means of resolving conflict and meeting personal needs (Bandura, 1977). The slightly weaker correlation compared to emotional abuse implies that physical abuse operates through somewhat different pathways to criminal behavior, primarily through learned aggressive behavioral responses rather than through the broader psychological dysregulation associated with emotional abuse. This has practical implications for the design of differentiated institutional intervention strategies that address the specific behavioral consequences of physical abuse histories among inmates, particularly those convicted of violent offenses within the selected maximum-security prison facilities.

Implications of Institutional Strategies Used to Support Inmates in Coping with Adverse Childhood Experiences

The finding that institutional strategies available within the selected maximum-security prisons were limited, inadequately resourced, and insufficiently trauma-informed has critical implications for correctional policy and practice in Kenya. From the Psychoanalytic Theory perspective, the inadequacy of current institutional strategies implies that the unconscious psychological conflicts rooted in inmates' adverse childhood experience histories remain largely unaddressed within Kenya's correctional system, perpetuating the cycle of unresolved trauma that contributes to continued criminal behavioral patterns and high recidivism rates (Perlman and Brandell, 2010). This implies an urgent need for the Kenya Prisons Service to invest in psychodynamically informed therapeutic interventions that help inmates process and resolve the unconscious psychological consequences of their childhood adversity histories within the correctional setting.

From the Social Learning Theory perspective, the finding that current institutional strategies are predominantly general rather than trauma-specific implies that inmates are not being provided with adequate alternative behavioral models and reinforcement structures to replace the maladaptive behavioral patterns learned through their adverse childhood experience histories (Miller and Najavits, 2012). The high reliance on religious coping among inmates, while culturally appropriate, implies that without structured trauma-informed institutional support that provides evidence-based alternative behavioral frameworks, inmates are left to manage the psychological

consequences of their childhood adversity through largely informal and unstructured coping mechanisms. This implies that Kenya's correctional institutions must fundamentally reform their institutional support approaches to provide comprehensive, trauma-informed, and evidence-based programs that directly address the adverse childhood experience histories of their inmate populations.

Conclusions

The general objective of this study was to examine the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. Specific objectives were to determine the prevalence and predominant types of adverse childhood experiences among inmates, establish the relationship between childhood emotional abuse and criminal behavior, examine the relationship between childhood physical abuse and criminal behavior, and evaluate institutional strategies used to support inmates in coping with adverse childhood experiences in selected maximum-security prisons in Nairobi City County, Kenya. The conclusions are presented per objective and explain the extent to which each of the four revised research questions has been answered by the findings of the study.

Prevalence and Predominant Types of Adverse Childhood Experiences among Inmates

The study concludes that adverse childhood experiences are highly prevalent among inmates in maximum-security prisons in Nairobi City County, with 92.6% of respondents having experienced at least one form of childhood adversity. The predominant type of adverse childhood experience identified among the study

population was emotional abuse, specifically verbal abuse through swearing, insulting, and humiliation, which affected 83.2% of inmates and had the highest mean score among all ACE items assessed. Physical abuse through pushing, grabbing, and slapping was identified as the most prevalent physical abuse type, affecting 69.6% of inmates. These prevalence rates far exceed those typically reported in general population studies, confirming that childhood adversity and specifically emotional and physical abuse are defining characteristics of individuals incarcerated within Kenya's maximum-security correctional facilities and that these experiences play a critical role in shaping trajectories toward serious criminal offending.

Relationship between Emotional Abuse and Criminal Behavior

The study concludes that childhood emotional abuse has a significant positive relationship with criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, thereby answering the second research question. Higher levels of emotional abuse experienced during childhood were significantly associated with increased engagement in criminal activities during adulthood, with emotional abuse accounting for approximately 20.4% of the variance in criminal behavior scores at a correlation coefficient of 0.452 with a significance level of p less than 0.001. This conclusion confirms that psychological maltreatment during formative years leaves lasting impacts on behavioral patterns that manifest as criminal conduct in adulthood, consistent with both the Psychoanalytic Theory's emphasis on how emotional trauma disrupts ego development and the Social Learning Theory's

proposition that emotionally abusive environments provide maladaptive behavioral models that are subsequently imitated in adulthood.

Relationship between Physical Abuse and Criminal Behavior

The study concludes that childhood physical abuse demonstrates a significant positive relationship with criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, thereby answering the third research question. Inmates who experienced higher levels of physical violence during childhood showed increased involvement in criminal activities in adulthood, with physical abuse accounting for approximately 15.1% of the variance in criminal behavior scores at a correlation coefficient of 0.389 with a significance level of p less than 0.001. This conclusion supports the cycle of violence hypothesis, confirming that exposure to physical aggression during formative years teaches maladaptive behavioral responses and normalizes violence as a means of conflict resolution that subsequently manifests as criminal conduct in adulthood. While both emotional and physical abuse showed significant relationships with criminal behavior, emotional abuse demonstrated a slightly stronger association, suggesting that these different forms of childhood maltreatment operate through distinct psychological and behavioral pathways to influence adult criminal outcomes among the incarcerated population studied.

Institutional Strategies Used to Support Inmates in Coping with Adverse Childhood Experiences

The study concludes that while a range of institutional strategies exist within the selected maximum-security prisons to support inmates in coping with their adverse childhood experience histories, these strategies are inadequately resourced, insufficiently trauma-informed, and predominantly general rather than specifically designed to address the trauma-related needs of inmates with significant childhood adversity histories, thereby answering the fourth research question. Inmates personally relied predominantly on religious and acceptance-based coping strategies, reflecting both cultural factors in the Kenyan context and the limited availability of specialized institutional trauma interventions within the selected correctional facilities. Significant gaps exist between the documented high prevalence of childhood trauma among inmates and the institutional capacity to provide appropriate trauma-informed support, with key informants identifying resource constraints, inadequate staff training in trauma-informed care, and environmental barriers as the primary challenges limiting the effectiveness of available institutional strategies within Kenya's maximum-security prison system.

Recommendations

Suggestions for Improvements

Based on the findings of this study, several recommendations are proposed to address the high prevalence and predominant types of adverse childhood experiences

among inmates and improve trauma-informed institutional interventions within selected maximum-security prisons in Nairobi City County, Kenya.

The Kenya Prisons Service should implement comprehensive ACE screening protocols during intake assessments to identify inmates with trauma histories and determine the predominant types of adverse childhood experiences they experienced before the age of eighteen. This screening should utilize standardized and validated assessment tools including the ACE-Q and should be conducted by trained mental health professionals within the correctional facilities. Early identification of trauma exposure and predominant ACE types would enable targeted intervention planning and individualized risk assessment for institutional programming that addresses the specific childhood adversity histories of each inmate within Kenya's maximum-security correctional system.

Correctional facilities should adopt comprehensive trauma-informed care approaches that recognize the high prevalence and significant impact of emotional and physical abuse histories among incarcerated populations in Kenya. This includes creating physically and emotionally safe institutional environments, maximizing inmate choice and control within the constraints of the correctional setting, emphasizing collaboration in treatment planning between inmates and correctional staff, and building trustworthy therapeutic relationships between prison counsellors, wardens, probation officers, and inmates. All institutional policies and procedures within the selected maximum-security prisons should be reviewed and reformed through a trauma-

informed lens to ensure they do not inadvertently retraumatize inmates with significant adverse childhood experience histories.

Comprehensive training programs should be developed and implemented for all correctional staff at Langata Women's Maximum Security Prison and Kamiti Maximum Security Prison on trauma recognition, trauma-informed responses, and de-escalation techniques specifically designed for trauma-exposed inmates. This training should include a thorough understanding of ACE prevalence and predominant types, trauma symptoms and their behavioral manifestations within correctional settings, and evidence-based approaches to supporting inmates with emotional and physical abuse histories. Ongoing professional development and clinical supervision should be established to ensure the sustained and effective implementation of trauma-informed practices throughout the institutional operations of Kenya's maximum-security correctional facilities.

Given the significant relationship established between childhood emotional abuse and criminal behavior among inmates, correctional facilities should develop and implement specialized therapeutic programs that specifically address the psychological consequences of emotional abuse among the inmate population. These programs should include evidence-based interventions such as trauma-focused cognitive behavioral therapy, emotion regulation training, and psychodynamic therapeutic approaches that address the unconscious psychological conflicts rooted in inmates' emotional abuse histories. Prison counsellors should be equipped with the specific clinical skills and therapeutic tools required to deliver these specialized interventions effectively within

the correctional setting, ensuring that the relationship between emotional abuse and criminal behavior is systematically addressed as part of the rehabilitation process within Kenya's maximum-security prisons.

Given the significant relationship established between childhood physical abuse and criminal behavior among inmates, correctional facilities should implement evidence-based programs that specifically address the learned aggressive behavioral patterns associated with physical abuse histories among the inmate population. These programs should include structured anger management interventions, nonviolent conflict resolution training, and aggression replacement therapy that provide inmates with alternative behavioral frameworks to replace the violent conflict resolution patterns learned through their childhood physical abuse experiences. The implementation of these programs should be prioritized for inmates convicted of violent offenses, who demonstrated the strongest associations between physical abuse histories and criminal behavioral patterns in the findings of the present study.

Policy Recommendations

The Government of Kenya should develop a comprehensive national policy framework for trauma-informed corrections that mandates systematic ACE screening, trauma-informed care implementation, and evidence-based trauma treatment within all correctional facilities across the country. This national policy framework should include dedicated funding mechanisms for trauma-informed correctional programs, clearly defined quality standards for trauma-informed institutional practices, and robust oversight and accountability procedures to ensure consistent implementation across all

correctional facilities. The policy framework should be developed in consultation with mental health professionals, correctional officers, former inmates, and relevant government ministries to ensure it is comprehensive, contextually appropriate, and practically implementable within the Kenyan correctional system.

Enhanced collaboration should be established between the Kenya Prisons Service, the Ministry of Health, and accredited mental health organizations to ensure adequate and sustained mental health service provision within correctional settings across Kenya. This collaboration should include the development of formal memoranda of understanding for mental health service provision, structured training partnerships for building trauma-informed capacity among correctional staff, and resource sharing arrangements that address the resource constraints currently limiting the effectiveness of institutional support strategies within Kenya's maximum-security prisons. This collaborative approach would ensure that inmates with adverse childhood experience histories receive comprehensive and coordinated mental health support that addresses both their immediate institutional needs and their long-term rehabilitation and reintegration requirements.

Investment in community-based child protection and family support programs is essential to prevent adverse childhood experience exposure among at-risk children and reduce future criminal justice involvement among affected populations in Kenya. This includes strengthening child welfare systems through increased funding and staffing for child protection services, developing evidence-based parenting support programs that equip parents and caregivers with the knowledge and skills needed to

create nurturing and non-abusive home environments, and establishing early intervention services for families identified as being at risk of child abuse and neglect. These preventive investments should be guided by the findings of the present study regarding the predominant types of adverse childhood experiences most strongly associated with criminal behavior among Kenya's maximum-security prison population.

Areas for Further Research

This study provided valuable insights into the relationship between adverse childhood experiences and criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. However, several areas warrant further investigation to enhance understanding and improve interventions within Kenya's correctional system. Future studies should employ comprehensive ACE assessments that include all traditional ACE categories including emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, and household dysfunction, as well as community-level adversities relevant to the Kenyan context. Research should examine the cultural adaptation of trauma-informed interventions for the Kenyan correctional context, including the integration of traditional healing practices with evidence-based trauma treatments.

Future research should investigate gender-specific pathways from childhood adversity to criminal behavior given the significant gender differences identified in the present study. Additionally, future research should investigate the biological mechanisms through which adverse childhood experiences influence criminal behavior,

with particular attention to how hormonal changes resulting from chronic childhood trauma exposure, including dysregulation of cortisol and stress hormones affecting impulse control and emotional regulation, may predispose affected individuals to criminal conduct in adulthood (Urban Institute, 2025). Finally, future research should evaluate the effectiveness of specific trauma-informed institutional strategies implemented within Kenyan maximum-security prisons in reducing recidivism and improving rehabilitation outcomes among inmates with adverse childhood experience histories.

REFERENCES

Akers, R. L., and Jennings, W. G. (2015). Social learning theory. In A. R. Piquero (Ed.), *The handbook of criminological theory* (pp. 230-240). John Wiley and Sons.

Akers, R. L., and Jennings, W. G. (2019). The social learning theory of crime and deviance. In M. D. Krohn, N. Hendrix, G. Penly Hall, and A. J. Lizotte (Eds.), *Handbook on crime and deviance* (2nd ed., pp. 113-129). Springer.

Akers, R. L., and Jensen, G. F. (2017). The empirical status of social learning theory of crime and deviance: The past, present, and future. In F. T. Cullen, J. P. Wright, and K. R. Blevins (Eds.), *Taking stock: The status of criminological theory* (Vol. 15, pp. 37-76). Transaction Publishers.

Akers, R. L., and Jensen, G. F. (Eds.). (2011). *Social learning theory and the explanation of crime* (Vol. 1). Transaction Publishers.

Albert, B. (2017). Social learning theory of aggression. In R. J. Blanchard, D. C. Blanchard, G. Griebel, and D. Nutt (Eds.), *Control of aggression* (pp. 201-252). Routledge.

Amene, E. W., Annor, F. B., Gilbert, L. K., McOwen, J., Augusto, A., Manuel, P., N'gouanma Nobah, M. T. V., and Massetti, G. M. (2024). Prevalence of adverse childhood experiences in sub-Saharan Africa: A multicountry analysis of the Violence Against Children and Youth Surveys. *Child Abuse and Neglect, 150*, 106353. https://doi.org/10.1016/j.chiabu.2023.106353

American Psychological Association. (2018a). Physical abuse. In *APA dictionary of psychology*. https://dictionary.apa.org/physical-abuse

American Psychological Association. (2018b). Emotional abuse. In *APA dictionary of psychology*. https://dictionary.apa.org/emotional-abuse

Anderson, D. M. (2021). The cost of crime. *Foundations and Trends in Microeconomics, 7*(3), 209-265. https://doi.org/10.1561/0700000047

Baglivio, M. T., Wolff, K. T., Piquero, A. R., and Epps, N. (2015). The relationship between adverse childhood experiences and juvenile offending trajectories in a juvenile offender sample. *Journal of Criminal Justice, 43*(3), 229-241. https://doi.org/10.1016/j.jcrimjus.2015.04.012

Baker, T. L. (1994). *Doing social research* (2nd ed.). McGraw-Hill.

Bandura, A. (1969). Social-learning theory of identificatory processes. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213-262). Rand McNally.

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

Bartol, C. R., and Bartol, A. M. (2014). *Criminal behaviour: A psychological approach* (10th ed.). Pearson.

Basto-Pereira, M., Charron, A., Bergeron, J., Desmarais, S. L., and Tardif, M. (2022). The global impact of adverse childhood experiences on criminal behavior: A cross-continental study. *Child Abuse and Neglect, 123*, 105-118. https://doi.org/10.1016/j.chiabu.2021.105387

Bhargav, M., and Swords, L. (2024). Two sides of the coin: The roles of adverse childhood experiences and positive childhood experiences in college students mental health. *Journal of Interpersonal Violence, 39*(3-4). https://doi.org/10.1177/08862605231220018

Bobbio, A., Arbach, K., and Illescas, S. R. (2020). Juvenile delinquency risk factors: Individual, social, opportunity or all of these together? *International Journal of Law, Crime and Justice, 62*, 100388. https://doi.org/10.1016/j.ijlcj.2020.100388

Brakel, L. A. (2004). Freud's psychoanalysis and its relevance today. *Journal of Contemporary Psychoanalysis, 40*(1), 32-45.

Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Bronson, J., and Carson, E. A. (2019). *Prisoners in 2017* (NCJ 252156). Bureau of Justice Statistics, U.S. Department of Justice.

Caravaca-Sanchez, F., Fearn, N. E., Vidovic, K. R., and Vaughn, M. G. (2019). Female prisoners in Spain: Adverse childhood experiences, negative emotional states, and social support. *Health and Social Work, 44*(3), 157-166.

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioural Medicine, 4*(1), 92-100.

Cicchetti, D., and Toth, S. L. (1993). *Child abuse, child development, and social policy* (Advances in Applied Developmental Psychology, Vol. 8). Ablex Publishing Corporation.

Clark, V. A., and Duwe, G. (2025). Sex differences in the effects of adverse childhood experiences on institutional misconduct among adults in prison. *Journal of Interpersonal Violence*. https://doi.org/10.1177/08862605241246799

Coelho, J., Barros, S., Dias, D., Martinho, G., and Santos, A. (2025). The mental health outcomes of trauma-informed intervention programs in prisons: A systematic review. *The Prison Journal*. https://doi.org/10.1177/00938548251350114

Compas, B. E., Jaser, S. S., Bettis, A. H., Watson, K. H., Gruhn, M. A., Dunbar, J. P., Williams, E., and Thigpen, J. C. (2017). Coping, emotion regulation, and psychopathology in childhood and adolescence: A meta-analysis and narrative review. *Psychological Bulletin, 143*(9), 939-991. https://doi.org/10.1037/bul0000110

Cornell Law School. (2022). Criminal law. *Legal Information Institute*. https://www.law.cornell.edu/wex/criminal_law

Coulacoglou, C., and Saklofske, D. H. (2018). *Psychometrics and psychological assessment: Principles and applications*. Elsevier.

Cowling, N. (2024). Number of reported crimes in Kenya 2022, by type. *Statista*. https://www.statista.com/statistics/1241472

Creswell, J. W., and Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approach* (5th ed.). SAGE Publications.

Crick, S. N., Crittenden, C. A., Policastro, C. N., Garland, T. S., and Dierenfeldt, R. (2024). Adverse childhood experiences and co-occurring disorders: Is there a relationship among ACEs, mental health issues, and substance use among inmates? *Journal of Drug Issues, 54*(3), 476-497. https://doi.org/10.1177/00220426231176466

Cui, N., and Liu, J. (2020). Physical abuse, emotional abuse, and neglect and childhood behavior problems: A meta-analysis of studies in mainland China. *Trauma, Violence, and Abuse, 21*(1), 206-224.

Daines, C. L., Braver, S. L., Holtrop, K., and Rains, M. (2021). Adverse and positive childhood experiences and adult family health. *BMC Public Health, 21*, 651. https://doi.org/10.1186/s12889-021-10732-w

Dube, S. R., Felitti, V. J., Dong, M., Giles, W. H., and Anda, R. F. (2003). The impact of adverse childhood experiences on health problems: Evidence from four birth cohorts dating back to 1900. *Preventive Medicine, 37*(3), 268-277. https://doi.org/10.1016/S0091-7435(03)00123-3

Dye, H. L. (2019). Is emotional abuse as harmful as physical and/or sexual abuse? *Journal of Child and Adolescent Trauma, 13*(4), 399-407. https://doi.org/10.1007/s40653-019-00292-y

Elliott, C. (2017). *Psychoanalytic perspectives on personality development*. Cambridge University Press.

Ellis, W. R., and Dietz, W. H. (2017). A new framework for addressing adverse childhood and community experiences: The Building Community Resilience Model. *Academic Pediatrics, 17*(7S), S86-S93.

Federal Bureau of Investigation. (2019). *2018 crime statistics released*. https://www.fbi.gov/news/stories/2018-crime-statistics-released-093019

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., and Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245-258.

Fenichel, O. (2014). *The psychoanalytic theory of neurosis*. Routledge.

Fitzgerald, A. J., Barrett, B. J., Gray, A., and Cheung, C. H. (2020). The connection between animal abuse, emotional abuse, and financial abuse in intimate relationships: Evidence from a nationally representative sample of the general public. *Journal of Interpersonal Violence*. https://doi.org/10.1177/0886260520939197

Ford, K., Barton, E. R., Newbury, A., Hughes, K., Bezeczky, Z., Roderick, J., and Bellis, M. A. (2019). *Understanding the prevalence of adverse childhood experiences in a male offender population in Wales: The Prisoner ACE Survey*. Public Health Wales NHS Trust.

Ford, K., Bellis, M. A., Hughes, K., Barton, E. R., and Newbury, A. (2020). Adverse childhood experiences: A retrospective study to understand their associations with lifetime mental health diagnosis, self-harm or suicide attempt, and current low mental wellbeing in a male Welsh prison population. *Health and Justice, 8*, 1-13.

Freud, S. (1995). *The interpretation of dreams* (J. Strachey, Trans.). Basic Books. (Original work published 1900)

Friestad, C., Ase-Bente, R., and Kjelsberg, E. (2014). Adverse childhood experiences among women prisoners: Relationships to suicide attempts and drug abuse. *International Journal of Social Psychiatry, 60*(1), 40-46. https://doi.org/10.1177/0020764012461235

Gaber, J., Scallan, E., and Kouyoumdjian, F. G. (2025). Understanding trauma-informed care in correctional facilities: A scoping review. *Journal of Correctional Health Care*. https://doi.org/10.1089/jchc.24.07.0056

Gedo, J. E., and Goldberg, A. (1976). *The psychoanalytic theory of object relations*. International Universities Press.

Giano, Z. W. (2021). The frequencies and disparities of adverse childhood experiences in the US. *BMC Public Health, 20*(1), 1-12.

Giordano, P. C., Cernkovich, S. A., and Rudolph, J. L. (2002). Gender, crime, and desistance: Toward a theory of cognitive transformation. *American Journal of Sociology, 107*(4), 990-1064. https://doi.org/10.1086/343191

Graf, G. H. J., Chihuri, S., Blow, M., and Li, G. (2021). Adverse childhood experiences and justice system contact: A systematic review. *Pediatrics, 147*(1). https://doi.org/10.1542/peds.2020-021378

Guntrip, H. (2008). *Schizoid phenomena and the psychoanalytic process*. Karnac Books.

Hampton-Anderson, J. N., Carter, S., Fani, N., Gillespie, C. F., Henry, T. L., Holmes, E., Lamis, D. A., LoParo, D., Ressler, K. J., Bradley, B., and Kaslow, N. J. (2021). Adverse childhood experiences in African Americans: Framework, practice, and policy. *American Psychologist, 76*(2), 314-325.

Hill, J. R., Song, L., and West, R. E. (2009). Social learning theory and web-based learning environments: A review of research and discussion of implications. *The American Journal of Distance Education, 23*(2), 88-103.

Hirschfield, P. J., and Gasper, J. (2011). The relationship between school engagement and delinquency in late childhood and early adolescence. *Journal of Youth and Adolescence, 40*(1), 3-22.

Jaffee, S. R., Ambler, A., Merrick, M., Goldman-Mellor, S., Odgers, C. L., Fisher, H. L., and Arseneault, L. (2018). Childhood maltreatment predicts poor economic and educational outcomes in the transition to adulthood. *American Journal of Public Health, 108*(9), 1142-1147.

Jaffee, S. R., Takizawa, R., and Arseneault, L. (2017). Buffering effects of safe, supportive, and nurturing relationships among women with childhood histories of maltreatment. *Psychological Medicine, 47*(15), 2628-2639. https://doi.org/10.1017/S0033291717000137

Janus, J. (2017). Psychoanalysis and the concept of childhood development. *Psychoanalytic Review, 104*(4), 511-530.

Kalia, V., and Knauft, K. (2020). Emotion regulation strategies modulate the effect of adverse childhood experiences on perceived chronic stress with implications for cognitive flexibility. *PLOS ONE, 15*(6), e0235412. https://doi.org/10.1371/journal.pone.0235412

Kessler, R. C., McLaughlin, K. A., Green, J. G., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., Aguilar-Gaxiola, S., Alhamzawi, A. O., Alonso, J., Angermeyer, M., and Williams, D. R. (2010). Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. *British Journal of Psychiatry, 197*(5), 378-385. https://doi.org/10.1192/bjp.bp.110.080499

Kinyua, J. (2019). *Childhood trauma and juvenile offending in Nairobi*. National Crime Research Centre, Kenya.

Kostić, M., Lazarević, L., Mandić Maravić, V., Mitković Vončina, M., Radosavljev Kirćanski, J., Stojković, A., and Videnović, M. (2019). *Adverse childhood experiences research in Serbia*. UNICEF. https://www.unicef.org/serbia/media/10726

Kovler, M. L., Ziegfeld, S., Ryan, L. M., Goldstein, M. A., Gardner, R., Garcia, A. V., and Nasr, I. W. (2020). Increased proportion of physical child abuse injuries at a level I pediatric trauma center during the COVID-19 pandemic. *Child Abuse and Neglect, 116*, 104757. https://doi.org/10.1016/j.chiabu.2020.104667

Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607-610. https://doi.org/10.1177/001316447003000308

Kruttschnitt, C. (2013). Gender and crime. *Annual Review of Sociology, 39*, 291-308. https://doi.org/10.1146/annurev-soc-071312-145605

Kumar, R. (2019). *Research methodology: A step-by-step guide for beginners* (5th ed.). SAGE Publications.

Li, M., D'Arcy, C., and Meng, X. (2020). Maltreatment in childhood substantially increases the risk of adult depression and anxiety in prospective cohort studies: Systematic review, meta-analysis, and proportional attributable fractions. *Psychological Medicine, 46*(4), 717-730. https://doi.org/10.1017/S0033291715002743

Li, S., Zhao, F., and Yu, G. (2022). Childhood emotional abuse and depression among adolescents: Roles of deviant peer affiliation and gender. *Journal of Interpersonal Violence, 37*(1-2), NP830-NP850.

Lochner, L., and Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self-reports. *American Economic Review, 94*(1), 155-189. https://doi.org/10.1257/000282804322970751

Loewald, H. W. (1970). Psychoanalysis and the history of the mind. *International Journal of Psychoanalysis, 51*(2), 115-132.

Maia, B., Cruz, A. R., and Cunha, O. (2025). Adverse and positive childhood experiences and emotional regulation difficulties in a sample of incarcerated men. *Behavioral Sciences, 15*(6), 828. https://doi.org/10.3390/bs15060828

Martinkevich, P., Larsen, L. L., Graesholt-Knudsen, T., Hesthaven, G., Hellfritzsch, M. B., Petersen, K. K., Moller-Madsen, B., Schroder, H. O., Bunger, C. E., and Rolfing, J. D. (2020). Physical child abuse demands increased awareness during health and socioeconomic crises like COVID-19: A review and education material. *Acta Orthopaedica, 91*(5), 527-533.

Maxfield, M. G., and Widom, C. S. (1996). The cycle of violence: Revisited 6 years later. *Archives of Pediatrics and Adolescent Medicine, 150*(4), 390-395. https://doi.org/10.1001/archpedi.1996.02170290056009

McLeod, S. (2011). Albert Bandura's social learning theory. *Simply Psychology*.

Miedema, S., Chiang, L., Annor, F., and Achia, T. (2023). Cross-time comparison of adverse childhood experience patterns among Kenyan youth: Violence Against Children and Youth Surveys, 2010 and 2019. *Child Abuse and Neglect, 141*, 106153. https://doi.org/10.1016/j.chiabu.2023.106153

Miller, N. A., and Najavits, L. M. (2012). Creating trauma-informed correctional care: A balance of goals and environment. *European Journal of Psychotraumatology, 3*(1), 1-8. https://doi.org/10.3402/ejpt.v3i0.17246

Ministry of Labour and Social Protection of Kenya, Department of Children's Services. (2019). *Violence against children in Kenya: Findings from a national survey*. Government of Kenya.

Mitkovic, V. M., Pejovic, M. M., Mandic, M. V., and Lecic, T. D. (2017). Timeline of intergenerational child maltreatment: The mind-brain-body interplay. *Current Psychiatry Reports*, *19*(8), 50.

Mkumbo, D. R., Otieno, K. O., and Rufyiriza, C. G. (2023). Coping strategies among first year students and its influence on their education. *Journal of Research Innovation and Implications in Education, 7*(4), 480-492. https://doi.org/10.59765/qhrv2759

Moffitt, T. E. (2018). Male antisocial behaviour in adolescence and beyond. *Nature Human Behaviour*, *2*(3), 177-186. https://doi.org/10.1038/s41562-018-0309-4

Muriuki, S. N. M. (2017). *The relationship between childhood trauma, adult trauma and the severity of adult criminal behaviour committed by female clients at Langata Women's Maximum Prison* [Master's thesis, United States International University Africa]. School of Humanities and Social Sciences.

Musili, F. M., Karugu, W. N., and Ogega, P. N. (2016). Rehabilitation of offenders through vocational skills training: An assessment of Langata Women Prison, Kenya. *International Journal of Education and Research, 4*(7), 219-232.

Mutia, A. E. (2025). Psychosocial support programs and recidivism in prisons in Nairobi City County, Kenya. *Journal of Research, Innovation and Implications in Education, 9*(1). https://www.jriiejournal.com/wp-content/uploads/2025/03/JRIIE-9-1-033.pdf

Nabavi, R. T. (2012). Bandura's social learning theory and social cognitive learning theory. *Theory of Developmental Psychology*, *1*(1), 1-24.

Nagel, T. (2020). *Psychoanalysis and the philosophy of mind*. University of Chicago Press.

Naidoo, S., Paruk, S., Ferreira, L., and Subramaney, U. (2024). Adverse childhood experiences, mental illness, HIV and offending among female inmates in Durban, South Africa. *South African Journal of Psychiatry, 30*, 2108. https://doi.org/10.4102/sajpsychiatry.v30i0.2108

Ness, O., Borg, M., and Davidson, L. (2023). A narrow focus in research on emotional abuse: A scoping review. *Child and Family Social Work, 28*(2), 572-588. https://doi.org/10.1111/cfs.12967

Neziroglu, F., Khemlani-Patel, S., and Veale, D. (2008). Social learning theory and cognitive behavioral models of body dysmorphic disorder. *Body Image, 5*(1), 28-38.

Njuguna, W. J. (2026). Psychological pathways to youth offending in Nairobi: The roles of trauma, impulsivity, self-control, peer delinquency, and risk perception. *International Journal of Criminology and Criminal Law, 4*(1). https://www.opastpublishers.com/open-access-articles/psychological-pathways-to-youth-offending-in-nairobi

Noy, D. (1969). *The theory of the unconscious in Freudian psychoanalysis*. Oxford University Press.

Nunnally, J. C., and Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

Otieno, A. (2018). *Effectiveness of offender rehabilitation programmes in addressing the psychological needs of women offenders within the prisons in Kenya* [Doctoral thesis, Kenyatta University].

Pace, C. S., Muzi, S., Rogier, G., Meinero, L. L., and Marcenaro, S. (2022). The Adverse Childhood Experiences-International Questionnaire in community samples around the world: A systematic review. *Child Abuse and Neglect, 129*, 105640.

Peng, J., Li, D., Li, D., Jia, J., Wang, Y., Sun, W., and Zhou, Y. (2022). Childhood physical abuse and behavioral problems among Chinese adolescents: The mediating role of aggression. *Journal of Interpersonal Violence, 37*(17-18), NP15439-NP15462. https://doi.org/10.1177/08862605211001452

Perlman, H. H., and Brandell, J. R. (2010). *Psychodynamic social work: Theory and practice*. Columbia University Press.

Perry, D. G., and Bussey, K. (1979). The social learning theory of sex differences: Imitation is alive and well. *Journal of Personality and Social Psychology, 37*(10), 1699-1712.

Pratt, T. C., Cullen, F. T., Sellers, C. S., Winfree, L. T., Jr., Madensen, T. D., Daigle, L. E., Fearn, N. E., and Gau, J. M. (2010). The empirical status of social learning theory: A meta-analysis. *Justice Quarterly, 27*(6), 765-802.

Rapaport, D. (1960). *The structure of psychoanalytic theory*. Columbia University Press.

Ravitch, S. M., and Riggan, M. (2016). *Reason and rigor: How conceptual frameworks guide research* (2nd ed.). SAGE Publications.

Rotter, J. B. (2021). Social learning theory. In *Expectations and actions* (pp. 241-260). Routledge.

Sampson, R. J., Morenoff, J. D., and Raudenbush, S. (2006). Social anatomy of racial and ethnic disparities in violence. *American Journal of Public Health, 95*(2), 224-232. https://doi.org/10.2105/AJPH.2004.037705

Sheffler, J. L., Piazza, J. R., Quinn, J. M., Sachs-Ericsson, N. J., and Stanley, I. H. (2019). Adverse childhood experiences and coping strategies: Identifying pathways to resiliency in adulthood. *Anxiety, Stress, and Coping, 32*(5), 594-609.

Shulman, S. (1990). Unconscious drives and psychoanalytic theory: A review. *Journal of the American Psychoanalytic Association, 38*(3), 526-535.

Taherdoost, H. (2016). Sampling methods in research methodology: How to choose a sampling technique for research. *International Journal of Academic Research in Management, 5*(2), 18-27. https://doi.org/10.2139/ssrn.3205035

Takahashi, M., Yamaki, M., Kondo, A., Hattori, M., Kobayashi, M., and Shimane, T. (2022). Prevalence of adverse childhood experiences and their association with suicidal ideation and non-suicidal self-injury among incarcerated methamphetamine users in Japan. *Child Abuse and Neglect, 131*, 105763.

Tiwari, A. (2020). A study of criminal behaviour: Causality and prevention of crime. *International Journal of Advanced Research, 8*(5), 1185-1194. https://doi.org/10.21474/IJAR01/10795

Tu, C. H. (2000). On-line learning migration: From social learning theory to social presence theory in a CMC environment. *Journal of Network and Computer Applications, 23*(1), 27-37.

Umpunjun, P., Webb, E. L., and Morris, D. J. (2024). Prevalence of types of adverse childhood experiences in incarcerated males: A systematic review and meta-analysis. *Psychology, Crime and Law*, 1-29.

United Nations Children's Fund. (2019). *Adverse childhood experiences research in Serbia*. UNICEF. https://www.unicef.org/serbia/media/10726

United Nations Office on Drugs and Crime. (2006). *Custodial and non-custodial measures: The prison system: Criminal justice assessment toolkit*. United Nations.

United Nations Office on Drugs and Crime. (2013). *Global study on homicide 2013*. UNODC.

Urban Institute. (2025). *To improve safety, understanding and addressing the link between childhood trauma and crime is key*. https://www.urban.org/urban-wire/improve-safety-understanding-and-addressing-link-between-childhood-trauma-and-crime-key

Waelder, R. (1933). Developmental stages in the psychoanalytic theory of personality. *Journal of the American Psychoanalytic Association, 1*(4), 431-448.

Walmsley, R. (2017). *World female imprisonment list* (4th ed.). Institute for Crime and Justice Policy Research.

Watts, S. J., and McNulty, T. L. (2013). Childhood abuse and criminal behavior: Testing a general strain theory model. *Journal of Interpersonal Violence, 28*(15), 3023-3040. https://doi.org/10.1177/0886260513488696

Widom, C. S. (1989). The cycle of violence. *Science, 244*(4901), 160-166. https://doi.org/10.1126/science.2704995

Wolff, N., and Shi, J. (2012). Childhood and adult trauma experiences of incarcerated persons and their relationship to adult behavioral health problems and treatment. *International Journal of Environmental Research and Public Health, 9*(5), 1908-1926. https://doi.org/10.3390/ijerph9051908

World Health Organization. (2018). *Child maltreatment*. https://www.who.int/violence_injury_prevention/violence/child/en/

World Health Organization. (2019). *Global status report on preventing violence against children 2020*. WHO.

Wright, B. R. E., Caspi, A., Moffitt, T. E., and Silva, P. A. (1999). Low self-control, social bonds, and crime: Social causation, social selection, or both? *Criminology, 37*(3), 479-514. https://doi.org/10.1111/j.1745-9125.1999.tb00494.x

Zavala, E., and Guadalupe-Diaz, X. (2018). Assessing emotional abuse victimization and perpetration: A multi-theoretical examination. *Deviant Behavior*, *39*(11), 1515-1532.

Zietz, S., Schultz, N. C., Gerke, J., Schreitmüller, N., Witt, S. H., Rietschel, M., Streit, F., Dannlowski, U., Dukal, H., Gruber, M., Rader, A., Erhardt, A., Czisch, M., Jovanovic, T., Tuscher, O., Kalisch, R., Kleim, B., Yuen, K. S. L., and Kumsta, R. (2020). Childhood trauma and functional connectivity within the default mode network: A transdiagnostic approach. *Comprehensive Psychiatry, 99*, 152174. https://doi.org/10.1016/j.comppsych.2020.152174

APPENDICES

Appendix I: Inform Consent Form

Title of the Study: Relationship Between Adverse Childhood Experiences and Criminal Behavior: A Case of Inmates in Selected Maximum-Security Prisons in Nairobi City County, Kenya

Purpose of the Study

You are being asked to take part in a research study that aims to understand adverse childhood experiences and how they may be related to criminal behavior. The study also seeks to understand the support and coping strategies used by inmates to deal with such experiences.

Voluntary Participation

Your participation in this study is completely voluntary. You may choose to take part or refuse without any punishment or loss of benefits. If you agree to participate, you may stop at any time without giving a reason.

Procedures

If you agree to participate, you will be asked to answer a questionnaire. The questions will focus on your background, childhood experiences, and related issues. The process will take approximately 20–30 minutes.

Risks and Discomfort

Some questions may make you feel uncomfortable or emotional. You are free to skip any question you do not wish to answer or stop participating at any time.

Benefits

There may be no direct benefit to you. However, the information collected may help improve understanding of trauma and contribute to better rehabilitation and support programs within prison settings.

Confidentiality

All information you provide will be kept strictly confidential. Your name will not appear on the questionnaire, and your responses will be used only for academic research purposes. The information will not affect your legal status or prison conditions.

Contact Information

Fridah Muthoni
+254720040376
Master's Student, Pan African Christian University

Consent

By signing below, you confirm that:

The purpose of the study has been explained to you

You understand that participation is voluntary

You agree to take part in the study

Participant's Signature / Thumbprint: _____ Date: _____

Researcher's Signature: _____ Date: _____

Appendix II: SD Questionnaire

Introduction

This questionnaire is designed to collect information on adverse childhood experiences (ACEs) and their relationship to criminal behavior among inmates in selected maximum-security prisons in Nairobi City County, Kenya. The study seeks to understand the prevalence of ACEs, how early life experiences may influence patterns of offending, and the coping or support strategies available within prison settings.

Participation in this study is entirely voluntary. All information provided will be treated with strict confidentiality and used solely for academic research purposes. Your responses will not affect your legal status or prison conditions in any way. By participating, you are contributing to research that aims to inform trauma-informed rehabilitation and crime-prevention strategies.

Please tick (√) or fill in the appropriate response.

1. Age (in years):

   i. 18-25 [ ]
   ii. 26-35 [ ]
   iii. 36-45 [ ]
   iv. Above 45 [ ]

2. Gender:

   i. Male [ ]
   ii. Female [ ]

3. Level of Education:

   i. No formal education [ ]
   ii. Primary [ ]
   iii. Secondary [ ]
   iv. College/University [ ]

4. Marital Status:

   i. Single [ ]
   ii. Married [ ]
   iii. Divorced/Separated [ ]
   iv. Widowed [ ]

1. Length of currant sentence: _____
2. Type of offense:

   Violent offense [ ]

   Property crime [ ]

   Drug-related offense [ ]

Other [ ]

SECTION B: ADVERSE CHILDHOOD EXPERIENCES

The following questions ask you about events that happened during your childhood; specifically, the first 18 years of your life. The information you provide by answering these questions will allow us to better understand the problems that may have occurred early in your life and allow us to explore how those problems may be impacting the challenges you may be experiencing today. Tick only one box.

In each of the following Items, how relevant are it to you while you were growing up, during the first 18 years of your life	Experience Type	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)
1. Did a parent or other adult in the household swear at you, insult you, put you down, or humiliate you?	Emotional Abuse					
2. Did a parent or other adult in the household act in a way that made you afraid that you might be physically hurt?	Emotional Abuse					
3. Did you feel that no one in your family loved you or thought you were important or special?	Emotional Abuse					
4. Did you feel that your family didn't look out for each other, feel close to each other, or support each other?	Emotional Abuse					
5. Did a parent or other adult in the household push, grab, slap, or throw something at you?	Physical Abuse					
6. Did a parent or other adult in the household hit you so hard that you had marks or were injured?	Physical Abuse					
7. Were any of your parents or other adult caregivers physically violent toward each other (pushing, hitting, kicking, etc.)?	Physical Abuse					

SECTION C: BRIEF COPE INVENTORY

Please indicate what you generally do and feel when you experience stressful events. Use the following scale to rate each item: 1 = I usually don't do this at all 2 = I usually do this a little bit 3 = I usually do this a medium amount 4 = I usually do this a lot

Item	Statement	1	2	3	4
1	I turn to work or other activities to take my mind off things.	□	□	□	□
2	I concentrate my efforts on doing something about the situation I'm in.	□	□	□	□
3	I say to myself "this isn't real."	□	□	□	□
4	I use alcohol or other drugs to make myself feel better.	□	□	□	□
5	I get emotional support from others.	□	□	□	□
6	I give up trying to deal with it.	□	□	□	□
7	I take action to try to make the situation better.	□	□	□	□
8	I refuse to believe that it has happened.	□	□	□	□
9	I say things to let my unpleasant feelings escape.	□	□	□	□
10	I get help and advice from other people.	□	□	□	□
11	I use alcohol or other drugs to help me get through it.	□	□	□	□
12	I try to see it in a different light, to make it seem more positive.	□	□	□	□
13	I criticize myself.	□	□	□	□
14	I try to come up with a strategy about what to do.	□	□	□	□
15	I get comfort and understanding from someone.	□	□	□	□
16	I give up the attempt to cope.	□	□	□	□
17	I look for something good in what is happening.	□	□	□	□
18	I make jokes about it.	□	□	□	□
19	I do something to think about it less, such as going to movies, watching TV, reading, sleeping, or shopping	□	□	□	□
20	I accept the reality of the fact that it has happened.	□	□	□	□
21	I express my negative feelings.	□	□	□	□
22	I try to find comfort in my religion or spiritual beliefs.	□	□	□	□
23	I try to get advice or help from other people about what to do.	□	□	□	□
24	I learn to live with it.	□	□	□	□
25	I think hard about what steps to take.	□	□	□	□
26	I blame myself for things that happened.	□	□	□	□
27	I pray or meditate.	□	□	□	□
28	I make fun of the situation.	□	□	□	□

SECTION C: CRIMINAL BEHAVIOR ASSESSMENT SCALE

Instructions: Please indicate how frequently you engaged in the following behaviours that led to your current incarceration.

Item	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)
1. Engaged in property crimes (theft, burglary, vandalism)					
2. Participated in violent behaviour (assault, fighting)					
3. Involved in drug-related offenses					
4. Committed fraud or financial crimes					
5. Engaged in gang-related activities					
6. Violated court orders or probation terms					
7. Carried weapons illegally					
8. Committed crimes under the influence of substances					
9. Involved in planning criminal activities					
10. Acted as an accomplice in criminal activities					

Appendix III: Key Informant Guides

Instructions: The following questions will be used to guide in-depth interviews with prison counsellors, wardens, and probation officers. The questions are designed to elicit information related to the study's main research objectives. Probing questions may be used to encourage participants to elaborate on their responses and provide more detailed insights.

1. Prevalence and Nature of Adverse Childhood Experiences among Inmates

a) From your experience, how would you describe the presence of adverse childhood experiences among inmates?

b) What types of childhood experiences do inmates commonly report or discuss?

c) How do inmates describe the effect of these childhood experiences on their lives?

2. Emotional Abuse and Criminal Behaviour

a) In what ways does emotional abuse appear to shape inmates' behaviour, choices, and involvement in crime?

b) How do inmates describe the emotional effects of abuse, such as rejection, humiliation, fear, anger, or low self-worth?

c) Without mentioning names or identifying details, can you describe any situation where emotional abuse appeared to contribute to criminal behaviour?

3. Physical Abuse and Criminal Behaviour

a) What patterns have you observed between childhood physical abuse and later criminal behaviour among inmates?

b) How do inmates who experienced physical abuse describe its influence on their emotions, attitudes, aggression, or decision-making?

c) How does physical abuse appear to affect inmates' rehabilitation process?

4. Coping Strategies and Support for Inmates with Adverse Childhood Experiences

a) What support systems or rehabilitation programs are available for inmates with histories of childhood trauma?

b) How do these programs help inmates manage the effects of adverse childhood experiences?

c) What challenges are experienced in supporting inmates with childhood trauma histories?

d) What additional interventions would help inmates cope with adverse childhood experiences and support positive behavioural change?

Thank you

Appendix IV: Krejcie and Morgan

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Appendix V: NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 218948

Date of Issue: 16/July/2025

RESEARCH LICENSE



This is to Certify that Ms.. FRIDA MUTHONI NDUNGU of Pan Africa Christian University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: RELATIONSHIP BETWEEN ADVERSE CHILDHOOD EXPERIENCES AND CRIMINAL BEHAVIOR: A CASE OF INMATES IN SELECTED MAXIMUM SECURITY PRISONS IN NAIROBI CITY COUNTY, KENYA for the period ending : 16/July/2026.

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218948

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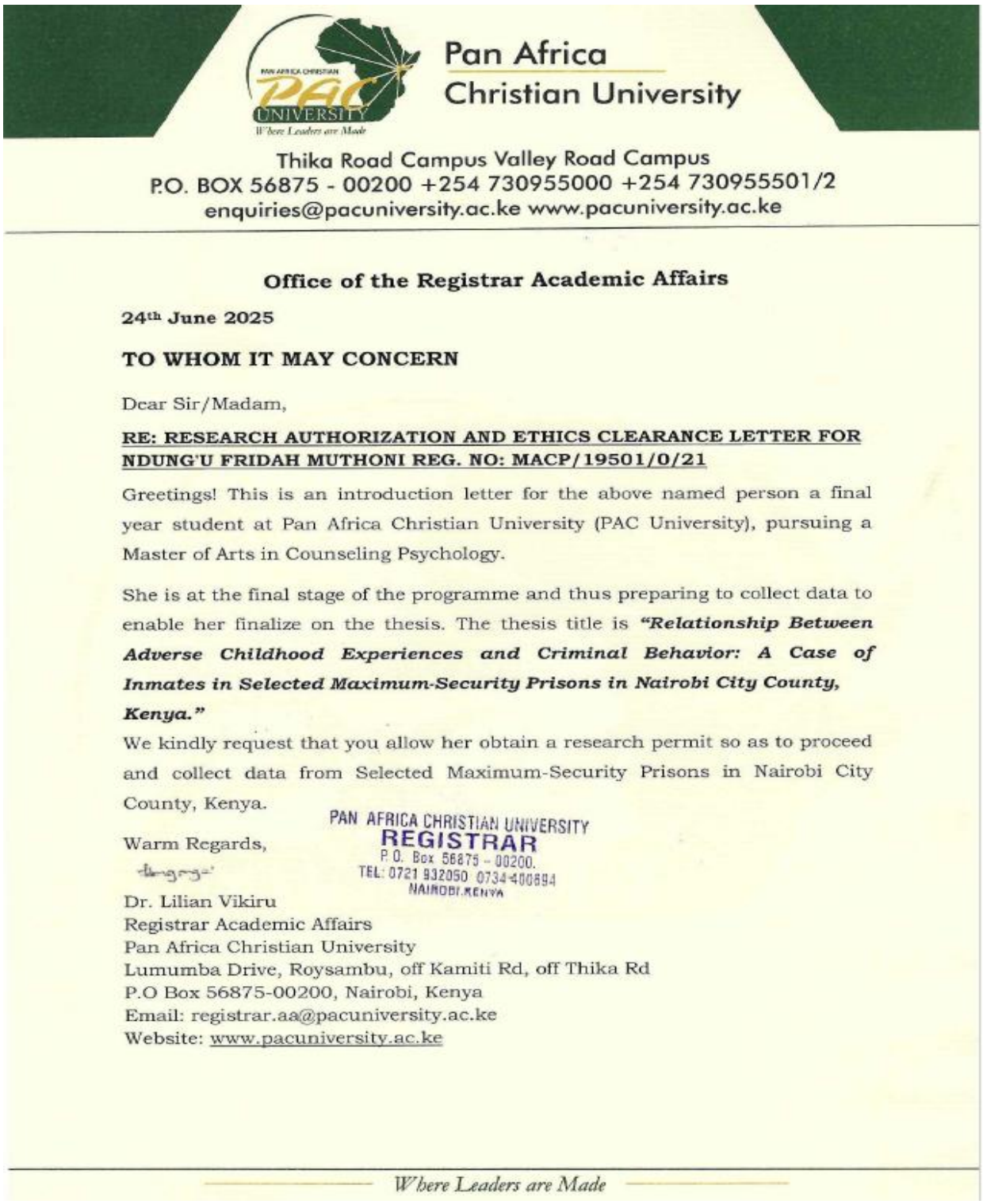
Ag. Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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See overleaf for conditions

Appendix VI: Research Authorization Letter



Pan Africa Christian University

Thika Road Campus Valley Road Campus
P.O. BOX 56875 - 00200 +254 730955000 +254 730955501/2
enquiries@pacuniversity.ac.ke www.pacuniversity.ac.ke

Office of the Registrar Academic Affairs

24th June 2025

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION AND ETHICS CLEARANCE LETTER FOR NDUNG'U FRIDAH MUTHONI REG. NO: MACP/19501/0/21

Greetings! This is an introduction letter for the above named person a final year student at Pan Africa Christian University (PAC University), pursuing a Master of Arts in Counseling Psychology.

She is at the final stage of the programme and thus preparing to collect data to enable her finalize on the thesis. The thesis title is ***"Relationship Between Adverse Childhood Experiences and Criminal Behavior: A Case of Inmates in Selected Maximum-Security Prisons in Nairobi City County, Kenya."***

We kindly request that you allow her obtain a research permit so as to proceed and collect data from Selected Maximum-Security Prisons in Nairobi City County, Kenya.

PAN AFRICA CHRISTIAN UNIVERSITY
REGISTRAR
P.O. Box 56875 - 00200.
TEL: 0721 932050 0734 400894
NAIROBI, KENYA

Warm Regards,

Dr. Lilian Vikiru
Registrar Academic Affairs
Pan Africa Christian University
Lumumba Drive, Roysambu, off Kamiti Rd, off Thika Rd
P.O Box 56875-00200, Nairobi, Kenya
Email: registrar.aa@pacuniversity.ac.ke
Website: www.pacuniversity.ac.ke

Where Leaders are Made

Appendix VII: Ministry of Interior and National Administration State Department Letter



MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION
STATE DEPARTMENT OF CORRECTIONAL SERVICES
KENYA PRISONS SERVICE

Ref No. 2015152560/56

Date: 8th August 2025

Fredah Muthoni Ndung'u (ASP)
P. O. Box 44769-01100
LANGATA

RECEIVED

Officer OIC
TVA

The Officer in Charge
Langata Women Prison
P. O. Box 44769-01100
NAIROBI

RE: APPLICATION FOR APPROVAL TO CONDUCT ACADEMIC RESEARCH

This has reference to your letter requesting for approval to conduct academic research as a prerequisite for your Masters in Counseling Psychology offered at Pan Africa Christian University.

This is to inform you that your research request titled "**Relationship Between Adverse Childhood Experiences and Criminal Behavior: A Case of Inmates in Selected Maximum-Security Prisons in Nairobi City County, Kenya**" has been approved.

You shall be allowed access to Kamiti Maximum Prison and Langata Women Prison for a period of two (2) Months commencing 12th August 2025.

You will be expected to comply with Prisons rules and regulations during the research period. You will also be required to provide the Prisons Headquarters with a copy of your research findings at the end of your studies.

By a copy of this letter, The Officers in Charge, Kamiti Maximum Prison and Langata Women Prison are requested to assist you the necessary assistance.

ANDERSON M. MCHARO, MBS, ACGP
FOR: COMMISSIONER GENERAL OF PRISONS

Cc:
Officer in Charge,
Kamiti Maximum Prison
Langata Women Prison