



**Antisocial personality disorder and Dark Tetrad personality traits, violent crime, and
recidivism: A systematic review**

By

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ABSTRACT

Research indicates that some personality disorders such as antisocial personality disorder (ASPD) and certain personality traits, such as the Dark Tetrad personality traits; namely, psychopathy, sadism, narcissism, and Machiavellianism can be associated with criminal behavior. For this reason, researchers have investigated how ASPD, psychopathy, sadism, narcissism, and Machiavellianism are related to re-offending and violent crimes. Findings from several individual studies revealed that individuals with ASPD and Dark Tetrad traits are unable to conform to societal rules; therefore, they are at a greater risk to engage in re-offending behaviors.

The present research aimed to systematically collate findings of studies related to personality and recidivism. Electronic literature databases such as SAGE Journals, ClinicalKey, Google Scholar, EBSCOhost, ScienceDirect, Criminology Collection, APA PsychInfo, Academic Search Complete, APA PsychArticles, Criminal Justice Abstracts, MEDLINE, and Wiley Online Library were searched to identify studies examining the relation between ASPD, Dark Tetrad personality traits, recidivism, and violent crimes. Six articles were included in the present study. The current review found that certain traits of psychopathy and antisocial personality disorder predisposes offenders to reoffending. Furthermore, it was found that dysregulation of emotions explains criminal behavior. Findings from the present study may have an impact on how the justice system understands, predicts, and reduces recidivism.

Key words: Personality traits, Recidivism, Criminal behavior, Violent crime, Offender.



TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	2
ABSTRACT.....	3
CHAPTER 1: INTRODUCTION	6
BACKGROUND.....	6
DEFINITION OF TERMS.....	7
<i>Recidivism</i>	7
<i>Personality Disorders</i>	7
<i>Antisocial Personality Disorder (ASPD)</i>	7
<i>Dark Tetrad Personality</i>	7
<i>Violent Crime</i>	8
<i>Criminal Behavior</i>	8
RESEARCH PROBLEM	8
JUSTIFICATION OF THE STUDY.....	10
<i>Aim</i>	10
<i>Objective</i>	10
RESEARCH QUESTION	10
CHAPTER 2: LITERATURE REVIEW.....	11
INTRODUCTION	11
ANTISOCIAL PERSONALITY DISORDER (ASPD).....	12
DARK TRIAD AND TETRAD PERSONALITIES	12
PAST AND PRESENT CONTROVERSIES ON PERSONALITY TRAITS AND RECIDIVISM.....	13
EVOLUTION OF DARK TETRAD AND ANTISOCIAL PERSONALITY TRAITS.....	14
THE IMPACT OF ANTISOCIAL PERSONALITY DISORDER (ASPD) ON RECIDIVISM.....	14
ANTISOCIAL PERSONALITY DISORDER (ASPD) AND VIOLENT CRIMES	16
ANTISOCIAL PERSONALITY DISORDER (ASPD) IN A SOUTH AFRICAN PRISON.....	17
PSYCHOPATHY, RECIDIVISM, AND VIOLENT CRIMES.....	17
SADISM, RECIDIVISM, AND VIOLENT CRIMES.....	18
MACHIAVELLIANISM, RECIDIVISM, AND VIOLENT CRIMES.....	19
NARCISSISM, RECIDIVISM, AND VIOLENT CRIMES.....	20
CONCLUSION	20
CHAPTER 3: RESEARCH METHODOLOGY.....	22
INTRODUCTION	22
RESEARCH DESIGN: THE SYSTEMATIC REVIEW.....	22
<i>Conducting a Systematic Review</i>	23
Formulating the Research Question.	23
LOCATING STUDIES	23
SELECTING STUDIES.....	23
FIRST READING OF STUDIES	23
IDENTIFYING AND EXTRACTING FINDINGS	24
ABSTRACTING FINDINGS	27
SOUNDNESS OF RESEARCH	27
ETHICAL CONSIDERATION.....	27
DISSEMINATION OF RESEARCH RESULTS.....	28
CHAPTER 4: ANALYSIS	29
INTRODUCTION	29
<i>Theme 1: Offenders' dysregulation of emotions</i>	30
<i>Psychopathy is a Strong Predictor of Recidivism</i>	31
<i>Traits Influencing Violence</i>	32
CHAPTER 5: DISCUSSION	34
MAIN FINDINGS	34
<i>Offenders' Dysregulation of Emotions</i>	34
<i>Psychopathic Traits are a Strong Predictor of Recidivism</i>	35



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<i>Traits Influencing Violence</i>	35
LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH.....	36
CONCLUSION	36
REFERENCES	37
APPENDIX A: PRISMA FLOW DIAGRAM	54

CHAPTER 1: INTRODUCTION

Background

Re-offending, also known as recidivism, can be described as a relapse process in which an offender falls back into criminal behavior (Zamble & Quinsey, 1997). The risk for reoffending behavior among convicted populations is a widely researched area (Clark, 2014; Koschmann & Peterson, 2013; Liem et al., 2014; Moore & Eikenberry, 2020; Shoham et al., 2014). Recidivism was first defined in a criminal justice context by Maltz (1984) to refer to re-offending after an offender has been convicted, sentenced, and rehabilitated. Recent evidence suggests that recidivism remains a significant concern among researchers, practitioners, and policymakers (Robertson et al., 2020). A possible explanation for this might be that recidivism causes high crime rates and high prison populations (Nyuyen, 2012; Matusitz & Breen, 2013). In South Africa, statistics on recidivism are limited (Gaum et al., 2006). However, a study conducted in Barberton, South Africa, shows that offenders are rearrested within 18.8 months of release (Mabuza & Roelofse, 2013). The findings suggest that in terms of recidivism, South Africa is not an exception.

Researchers working in the disciplines of sociology and criminology have published a large volume of studies on risk factors associated with recidivism (Ang & Huan, 2008; Kenny et al., 2001; Kingsnorth, 2006; Makarios et al., 2010). Findings from these studies showed that criminal recidivism is caused by adverse social situations such as family problems or childhood experiences, deviant sexual experiences, intellectual and social incapacities, substance abuse, criminal history, and offenders' inability to adjust to society (Ang & Huan, 2008; Kenny et al., 2001; Mulder et al., 2010). Contrary to studies conducted within the American context, a South African study by Mabuza and Roelofse (2013) highlighted that the causes of criminal recidivism included alcohol consumption, poverty, dysfunctional families, overcrowded homes, and school dropouts. Gaum et al. (2006) corroborated Mabuza and Roelofse's (2013) findings and further asserted that criminal behavior is also associated with inaccessibility of social resources in South Africa. Primary studies conducted in both the South African and American context demonstrated that recidivism is caused by social conditions. Eysenck (1996) found that although many social conditions such as poverty and unemployment, known to be linked to recidivism, have improved, recidivism rates have not improved. Therefore, Eysenck (1977) concluded that the presence of certain personality traits in offenders, may explain recidivism. The term "personality traits" refers to different ways in which individuals behave, think, and feel during various situations, and such traits are considered stable over time (Ashton, 2013).

According to Worling (2001), personality traits can be an etiological pathway for recidivism. In other words, personality disorders with a combination of antisocial behaviors and impulsivity are more likely to be related to criminal recidivism. Yochelson and Samenow (2004) used the term "criminal personality traits" to refer to personality traits that predispose offenders to recidivism. Overall, the literature provides important insights into the relationship between personality traits and criminal behavior. Eysenck's theory of crime and personality rests heavily on the assumption that criminal behavior is influenced by personality

traits (Eysenck, 1977). The theory elaborates that the three dimensions of personality; namely, extraversion (E), neuroticism (N), and psychoticism (P) predisposes offenders to recidivism (Gudjonsson, n.d.). To extend knowledge on Eysenck's theory, other researchers such as Lee and Ashton (2012) further analyzed personality traits and organized them into six broad categories, i.e., (1) extraversion, (2) agreeableness, (3) conscientiousness, (4) neuroticism, (5) humanity-humility, and (6) openness to experience. The six personalities summarize people's personality by measuring traits that represent the big six personalities (Lee & Ashton, 2012). In addition, people with a combination of low agreeableness and low humanity-humility are prone to aggressive behavior, deviation from social norms and offending since such individuals lack empathy. To expand upon the literature of personality and re-offending, Ashton (2013) highlighted those offenders reoffend because of a lack of self-control, impulsivity, and an inability to delay immediate gratification. Traits of antisocial personality disorder (ASPD) and Dark Tetrad personality i.e., psychopathy, sadism, narcissism, and Machiavellianism were found to be associated with lack of self-control, lack of empathy, and impulsivity (Lyons, 2019; Shepherd et al., 2018). Offenders with traits of the abovementioned disorders violate social norms; therefore, they tend to repeat such violations. For example, a larger percentage of reconvicted offenders were found to have a diagnosis of either ASPD or one of the Dark Tetrad personality disorders (Fazel & Danesh, 2002; Shepherd et al., 2018). This evidence suggests that personality traits are fast becoming a key instrument in explaining recidivism.

Definition of Terms

Recidivism

According to Maltz (1984), recidivism derives from the Latin word *recidere*, meaning to fall back. A recidivist is a person who relapses to criminal activities after being released from prison.

Personality Disorders

Personality disorders refers to "an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture" (American Psychiatric Association [APA], 2013 p. 645). To extend knowledge on the definition of personality, Kernberg (2016) described personality as an integration of one's behavior and subjective experience; behavior in the context of personality denotes conscious and unconscious mannerism.

Antisocial Personality Disorder (ASPD)

According to Sadock et al. (2015), individuals with ASPD are unable to conform to social rules that govern society's members. Furthermore, most of these individuals have often violated and disregarded the rights of others since the age of 15 onwards (APA, 2013).

Dark Tetrad Personality

Dark Tetrad personalities are a constellation of psychopathy, Machiavellianism, narcissism, and sadism, and they share traits of manipulation, callousness, and self-centeredness (Lyons, 2019). Moreover, Dark Tetrad personalities are characterized by a general disregard for social norms (Lyons, 2019). Individuals with Dark Tetrad personality traits are said to engage in risk-taking behavior (Stanwix & Walker, 2021).

Violent Crime

Violent crime is a type of crime wherein an offender or perpetrator threatens to use force upon a victim; such crimes include murder and rape (Markowitz, 2005).

Criminal Behavior

The term “criminal behavior” has been applied to situations where an individual violates the state’s criminal law without legally acceptable justification (Schmallegger, 2018).

Research Problem

South Africa has the highest prison population on the African continent (World Prison Brief, 2019). Furthermore, South Africa is ranked as having the world’s twelfth highest number of prisoners, with 162 875 detainees listed on the Department of Correctional Service’s system (2019). With a total of 2.09 million crimes recorded in 2018 (South African Police Service, 2018), understanding risk factors related to criminal behavior in South Africa is critical, especially considering recidivistic behavior. Research highlights that criminal behavior is influenced by internally motivated states of the antisocial personalities; therefore, the psychological perspective is expected to shed light on recidivism (Eysenck, 1996).

According to the South African Department of Correctional Services’ (2019) 2017/2018 annual financial year report, 24% of inmates were involved in psychological services such as individual psychotherapy, group therapy, couples and family therapy, and structured programs such as anger management programs. The primary responsibility of the psychological service within the Department of Correctional Services is the management of psychological/mental health program where an offender is assisted to adjust at a correctional center, to learn new coping skills and to prevent re-offending behavior (Department of Correctional Services, 2016). However, according to the same report, 7% of prisoners within the system, deviated from treatment programs (Department of Correctional Services, 2019). Research shows that participation in prison-based cognitive-behavioral treatment programs lowered rates of recidivism (Friendship et al., 2003; Marshall & Burton, 2010). However, offenders with traits of callousness, lack of remorse, antisocial behavior, manipulation, and poor behavior control are unable to complete treatment programs because they are referred to disciplinary programs for misbehaving or placed in solitary confinement (Polaschek & Daly, 2013).

According to Salekin (2002) offenders with traits of callousness, and lack of empathy such as ASPD and psychopathy do not benefit from treatment programs; therefore, such offenders are difficult to treat. In a case where an offender with traits of callousness, lack of empathy, and antisocial behavior completes a treatment program, deception may be detected (Raskin & Hare, 1978). Moreover, offenders with antisocial behavior tend to use deception and manipulation to obtain approval for parole. Parole conditions look at factors such as employment, economic well-being, family support, offender rights and consider relevant legislation, calculate the minimum detention period, understand the criminal justice value chain, court papers, sentencing remarks, copy of the judgment, understand the rehabilitation process, risk assessment, victim/community empathy, and public safety (Department of Correctional Services, 2016; Robinson, 2005). Therefore, offenders with interpersonal traits

such as superficial charm, pathological lying, and manipulation can verbally lie and deceive the parole boards (Lee et al., 2008).

Matusitz and Breen (2013) reported that high crime statistics and overpopulation within prison institutions are positively linked with a larger percentage of recidivism rates. Lynch and Sabol (2001) asserted that offenders' re-entry to prison has resulted in prison populations expanding. Therefore, due to over-population in prisons, correctional services are unable to offer treatment programs to all offenders. This has resulted in offenders being released without participation in educational, vocational, and psychotherapy programs (Lynch & Sabol, 2001). Osei and Adu-Agyem (2015) highlighted that one of the challenges faced by service providers such as psychologists is that prisons are over-populated; consequently, it is difficult to meet inmates' need for psychological care. In South Africa, offenders stated that, due to over-population, they only consulted with a psychologist once, i.e., towards their release date (Gaum et al., 2006). Without participation in evidence-based treatment programs, it is expected that offenders will return to prison frequently (Matusitz & Breen, 2013; Lynch & Sabol, 2001).

Given that South Africa also has the highest prison population on the African continent, overcrowded prison facilities are considered a norm which means that re-offending behavior is high. Previous research has suggested that the prison population comprises of offenders with traits of Dark Tetrad personalities (Dietz et al., 1990; Hepper et al., 2014). In addition, a prison population is also made up of offenders with antisocial personality traits (Black et al., 2010). Findings from a study conducted in a South African prison (Loots & Louw, 2011) showed that 27% of offenders met the criteria for psychopathy; however, while 17% had antisocial personality traits; in addition, antisocial personality traits were associated with a higher risk for recidivism among state patients (Morgan & Del-Fabbro, 2018).

Offenders with antisocial and Dark Tetrad personality traits, specifically psychopathy, sadism, and narcissism pose a challenge within the justice system (Bonta et al., 2014; Harris et al., 1991; Međedović & Petrović, 2015; Zeigler-Hill & Marcus, 2016) considering that features of ASPD and Dark Tetrad personality traits are associated with poor treatment response (Lewis et al., 2013).

Antisocial and psychopathic personality traits are predictors of recidivism (Bonta et al., 2014; Lewis et al., 2013). Thus, offenders clinically diagnosed with either ASPDs or psychopathy do not respond positively to, e.g., behavioral modification programs or rehabilitation programs within prisons (Caputo, 2004). Traditionally, researchers proposed that recidivism could be instigated by looking at the failure of support in integration, rehabilitation programs, peer pressure and other provocation and economic stress (Bosworth, 2005; Gendreau et al., 1996; House et al., 2017; Khwela, 2015). There is a need for available studies relating to personality types to be synthesized to determine the extent to which personality traits such as the Dark Tetrad and antisocial can predict recidivism. The current study investigates the association between ASPD and Dark Tetrad personalities in relation to recidivism and violent crimes.

Justification of the Study

The criminal justice system is faced with the dilemma of offenders relapsing into criminality. Recidivism and related factors are one of the social conditions that continues to disrupt societies (Sorochi, 2015). The impact of recidivism on the criminal justice system is twofold. First, recidivism suggests that intervention programs are ineffective (Zara & Farrington, 2016). Second, the state's budget is affected by increased rates of offender's re-entry to prison (Koschmann & Peterson, 2013). In South Africa, it is reported that recidivism has resulted in a large prison population. Consequently, offenders are denied basic human and constitutional rights due to over-burdened prison facilities (Nyuyen, 2012). A preliminary literature review clarified that a large volume of primary studies has been published on recidivism and personality traits. However, the published studies presented conflicting findings. There is a demand for researchers to provide an outcome that is unanimous regarding personality and recidivism. The current study will appraise and synthesize the existing body of literature to provide an outcome that may serve as a guideline within the criminal justice system.

Aim

The study's aim is to examine the relationship between ASPD, Dark Tetrad personality traits, violent crime and recidivism.

Objective

The objective of the current review is to identify and analyze aspects of literature that investigate the relationship between ASPD, Dark Tetrad personality, violent crime and recidivism.

Research Question

The current study aims to address the following question: What would a systematic review clarify about the significance of the Dark Tetrad personality traits and ASPD in relation to violent crimes and recidivism?

CHAPTER 2: LITERATURE REVIEW

Introduction

Globally, it is indisputable that there is a fast-growing rate of crime (Galeotti, 2010). In an attempt to understand the high rate of crime in the world, the United Nations Interregional Crime and Research Institute established the crime and research institute to investigate the causes of criminal behaviour (UNICRI, 2018). On the other hand, psychology and criminology drew attention towards recidivism as the contributing factor to high crime rates (Zara & Farrington, 2016).

The first worldwide systematic review (Fazel & Wolf, 2015) synthesized recidivism data from 20 countries with a high prison population such as Canada, Denmark, Finland, France, Germany, Iceland, Ireland, and others. The aim was to report on whether the rates on recidivism were comparable or not. Findings of the study indicated that recidivism data was available in two countries; therefore, recidivism data could not be compared among international countries (Fazel & Wolf, 2015). Yukhnenko et al. (2019) conducted a follow-up systematic review that updated the literature on recidivism. The study compared recidivism rates among 50 countries with the highest prison populations. The findings showed that, of the 50 countries, 10 reported recidivism rates. When comparing the findings of the first review by Fazel and Wolf (2015) with the follow-up review (Yukhnenko et al, 2019), it showed that some countries made efforts to improve on reporting of recidivism rates. However, recidivism rates were still not comparable among countries. Furthermore, recidivism inspired researchers to investigate factors associated with future reoffending.

Professionals' interest in predictors of recidivism has grown in recent years. In this context, prediction of recidivism was described as a process of identifying and measuring the type of risks associated with recidivism (Zara & Farrington, 2016). Furthermore, prediction outcomes informed the justice system of which offenders were likely to reoffend. The accuracy of recidivism measurement was controversial to researchers (Zara & Farrington, 2016). Bonta et al. (1998) stated that few researchers would argue that criminal behavior could be predicted. While assessing the risk factors of recidivism, two distinct trends were found, i.e., static and dynamic factors, both elaborated factors related to recidivism (Zara & Farrington, 2016). Moreover, dynamic factors were changeable factors such as substance abuse and peer associations; in contrast, static factors included the criminal history of an offender, personality traits, and adverse childhood experiences (Zara & Farrington, 2016). Static factors could only change with age. For instance, Walker et al. (2003) pointed out that individuals with ASPD experience antisocial burnout, which was a decline in criminal behavior due to age. Research also showed that ASPD was linked with criminal behavior (Ullrich & Coid, 2010). According to Ogloff (2006), 50% to 80% of offenders met the criteria for ASPD. In recent years, there has been an increasing amount of literature on Dark Tetrad personalities, specifically, psychopathy and its association with recidivism and violent crime (Douglas et al. 2018; Gretton, 1998; Hemphill et al., 1998; Hemphill, 1992; Salekin, 2008; Salekin et al., 1998; Skeem & Cooke, 2020; Walters et al., 2011).

Antisocial Personality Disorder (ASPD)

Individuals who infringed societal norms persuaded clinicians and researchers of the nineteenth century to conduct research on related disorders (National Collaborating Centre for Mental Health [NCCMH], 2010). The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 2013, p.659), indicated that adults who presented with the following may be diagnosed with ASPD: “failure to conform to social norms, deceitfulness, impulsivity, irritability, consistent irresponsibility, and lack of remorse”. Furthermore, the World Health Organization (WHO), and International Classification of Diseases, 10th review (ICD-10) included ASPD as a diagnosis that described those who deviated from social norms (NCCMH, 2010). The evolution of ASPD began in the early 1800s. Prichard (1835, p.16) coined the term “moral insanity” to refer to “morbid perversion of the natural feelings, affections, inclinations, temper, habits, moral disposition, and natural impulses”. Moreover, moral insanity referred to individuals without psychotic features, i.e., no delusions or hallucinations. Maudsley (as cited in NCCMH, 2010) agreed with the use of the term “moral insanity” and further explained that a disorder without delusions, hallucination, or illusions might be categorized as partial insanity considering that such individual’s affective life was profoundly deranged. Moreover, Maudsley (as cited in NCCMH, 2010) suggested that clinicians should observe the behavior and desires of those with deranged affective life. After years of deliberation, moral insanity was accepted by the European and American courts as a disorder of the mind that explained antisocial behavior (NCCMH, 2010). Moral insanity was replaced by the term “psychopathic inferiority” coined by Koch (as cited in NCCMH, 2010). Sociopath personality was introduced thereafter, both psychopath and sociopath were used interchangeably to refer to persistent law breakers (Lykken, 1995). The term ASPD officially emerged in 1941(Walker et al., 2003). Nationally and internationally, antisocial personality was the term that remained in common use.

Dark Triad and Tetrad Personalities

There was a vast quantity of literature that had investigated dark triad personalities (Furnham et al., 2013; Jakobwitz & Egan, 2006; Jones & Paulhus, 2011; Wai & Tiliopoulos, 2012). Dark triad is the constellation of psychopathy, Machiavellianism, and narcissism (Paulhus & Williams, 2002). Moreover, individuals with dark triad personalities were within the normal range of functioning. Although an umbrella name, “dark triad” is used to refer to socially aversive personalities, the three personalities in the construct were distinct (Paulhus & Williams, 2002). Psychopathy is characterized by high impulsivity, thrill-seeking, low anxiety, and low empathy; Narcissism includes grandiosity, entitlement, domination, and superiority; Machiavellianism is characterized by a pattern of manipulation tendencies (Paulhus & Williams, 2002). In the same context, Paulhus and Williams (2002) further explained that although the differences in dark triad were noteworthy, the three personalities overlapped. First, Machiavellianism overlapped with psychopathy, Fehr et al. (1992) argued that both Machiavellianism and psychopathy were characterized by low empathy and low anxiety. Furthermore, both personalities showed low emotionality. Second, Machiavellianism was characterized by features that bore a strong resemblance to narcissism (Paulhus & Williams, 2002). Both Machiavellianism and narcissism had a need for social desirability. They projected a favorable image of themselves and focused on receiving positive feedback. Lavrakas (2008)

asserted that social desirability was a tendency wherein individuals made themselves seem desirable to other people. Moreover, those who sought to be desired tended to exaggerate competence, dominance, and intelligence. Third, narcissism overlapped with psychopathy (Paulhus & Williams, 2002). Furthermore, psychopaths and narcissists are selfish, they are both characterized by a pattern of self-promotion. Previous studies also investigated how psychopathy, Machiavellianism, and narcissism overlapped with each other (Fehr et al., 1992; Gustafson & Ritzer, 1995; McHoskey et al., 1998; McHoskey, 1995). From the six major dimensions of personality, i.e., neuroticism (N), extraversion (E), openness to experience (E), agreeableness (A), conscientiousness (C), and humanity-humility (HH), Paulhus and Williams (2002) reported that dark triad personalities were low in agreeableness (A). The facet of agreeableness focuses on interpersonal functioning. Therefore, low agreeableness inferred that people with dark triad personalities experience challenges with “trust, straightforwardness, compliance, and tender-mindedness” Costa, Mc Crae, and Dye (as cited in Furnham et al., 2013). In the recent years, there has been an increasing amount of literature on sadism (Berner et al., 2003; Buckels et al., 2013; Chester et al., 2019; Eher et al., 2016; Fedoroff, 2008; Foulkes, 2019). Prior to the fourth edition, the DSM III included the diagnostic criteria of sexual sadism. The DSM III’s emphasis of sadism was on its sexual manifestation, i.e., “the infliction of physical or psychological suffering on another person in order to achieve sexual excitement” (APA, 1980, p.274). In 1987, The DSM III-R focused on non-sexual presentation of the symptoms of sadism. Moreover, the DSM III-R suggested that sadism be categorized under personality disorders as sadism personality disorder. However, the proposed category needed further study (APA, 1987).

A large volume of published literature reported that individuals with sadistic traits experienced pleasure from other people’s suffering (Baumeister & Campbell, 1999; Beaver et al., 2011; Berger et al., 1999; O’Meara et al., 2011). Moreover, sadistic traits play a role in antisocial behavior (Foulkes, 2019). Personality research indicated that sadism overlapped with psychopathy (Reidy et al., 2011). Both dark personality constructs were characterized by low empathy; further, they were likely to engage in violent crime repeatedly (O’Connell & Marcus, 2019). The similarities between sadism, psychopathy, narcissism, and Machiavellianism led to the inclusion of sadism in the category of dark personalities, eventually, together, they formed the Dark Tetrad personalities (Book et al., 2016). There was a noteworthy positive correlation between sadism and other three dark personalities (Foulkes, 2019). While attempting to unpack Dark Tetrad personalities, Book et al. (2016) found that all four Dark Tetrad personalities were linked with low honesty and agreeableness. This evidence suggested that individuals with Dark Tetrad personalities exploited others; however, they did not show mercy to those who attempted to exploit them.

Past and Present Controversies on Personality Traits and Recidivism

Over the past three decades, the Minnesota Multiphasic Personality Inventory (MMPI) was widely used by psychologists to diagnose psychopathology and personality features among offenders in a forensic setting (Friedman et al., 2015). The MMPI is a standardized psychometric test which uses self-report questionnaire to discern personality features and psychopathology of adult patients (Nichols, 2011). Ingram et al., (1985) used the MMPI to

determine the personality disorders of offenders who persisted and reoffended. Recidivists scored higher on hypomania (MA) which measured hyperarousal, hyperactivity, stimulation-seeking, and rebellious impulses. Furthermore, recidivists also scored higher on psychopathic deviance (PD) which measured social disinhibition and tendency to engage in conflict with authorities (Nichols, 2011). Panton (1958) administered MMPI among 1313 prison inmates and found no marked difference between personality profiles of violent and non-violent offenders. Likewise, Wirt and Briggs (1959) collected data from 4000 ninth graders using the MMPI in Minneapolis and concluded that delinquents with psychopathic profiles engaged in the same violent crimes as non-delinquents. To summarize the available findings, Schuessler and Cressey (1950), reviewed 113 studies conducted using 54 different personality tests; namely, Bender-Gestalt, Draw-a-Person, MMPI, Rorschach, Thematic Apperception Test, and many others. The researchers concluded that there was no link between personality traits and criminal behavior. Waldo and Dinitz (1967) conducted a follow-up systematic review which updated the literature on criminal behavior and personality types between 1950 to 1965. The researchers reviewed 94 studies. They found that personality was linked to crime in 81% of the population. Nonetheless, Waldo and Dinitz (1967) maintained that there was no genuine relationship between personality and criminal conduct. Based on the results of the personality tests, previous studies concluded that there was no marked difference between offenders with personality traits and those without; however, researchers had not treated the offender's manipulative tendencies with much detail. For instance, psychopaths are "grandiose, deceptive, dominant, superficial and manipulative individuals who participate in a task when it is beneficial for them," (Mitchell & Aron, 2013, p. 230), such propensity should be considered in the administration of psychometric tests to offenders.

Evolution of Dark Tetrad and Antisocial Personality Traits

Dark Tetrad personality traits are referred to as "dark" because they are socially undesirable, beneficial for themselves and detrimental to others (Rauthmann & Kolar, 2012). Prisoners with specific personality traits such as ASPD, Dark Tetrad personality traits specifically psychopathy and narcissism were likely to re-offend compared to the general offender population (Bonta et al., 2014). Offenders presenting with Dark Tetrad personality traits ASPDs were known to be less cooperative and highly impulsive (Malesza, 2018). For instance, research has shown that incarcerated offenders with psychopathic traits were more aggressive, engaged in more misconduct and are more deceptive than prisoners without psychopathic traits (Azizli et al., 2016; Cayanus et al., 2005; Hobson et al., 2000; Williams et al., 2001). Previous studies conducted on predictors of recidivism (Ingram et al., 1985; Panton, 1958; Schuessler & Cressey, 1950; Wirt & Briggs, 1959), used personality tests to assess the likelihood of re-offending, meanwhile, recent studies (Malesza, 2018; Rauthmann & Kolar, 2012), observed the behavior of incarcerated offenders to conclude re-offending tendencies. The manifestation of behavior in prison was not random; and the sample of behavior indicated the overall behavior of an offender (Kellerman & Burry, 2007).

The Impact of Antisocial Personality Disorder (ASPD) on Recidivism

Personality studies reported that externalizing symptoms of ASPD served as major determinants of recidivism. Externalizing symptoms included aggression, impulsivity, low

constraint, and alienation (Cooke, 2010). Shepherd et al. (2018) carried out an investigation in Australia, the aim of which was to examine the relationship between ASPD, psychopathy, and recidivism. The researchers hypothesized that psychopathy and ASPDs were associated with violent recidivism. The researchers further measured ASPD and psychopathy of 136 randomly selected mentally ill offenders and forensic psychiatric patients (Shepherd et al., 2018). They used the DSM-IV TR to measure ASPD, Psychopathy Checklist-Revised (PCL-R) and Psychopathy Checklist: Screening Version (PCL-V) to measure psychopathy and extracted police legal records of reconviction to measure recidivism. The study's findings showed that there was a "strong" association between psychopathy, ASPD and recidivism (Shepherd et al., 2018). This finding appeared to support the researchers' hypothesis. It was unclear how the researchers justified the strong associations considering that the researchers used a small sample group, i.e., the study was conducted with 12.5% of the psychiatric population of Australia. The sample population limited generalization to forensic patients. Therefore, it is recommended that the same study be repeated with a larger sample.

Individuals with ASPD are said to have poor impulse control; consequently, they contributed to recidivism rates (Walker et al., 2003). A recent study examined the influence of self-control and hostility (symptoms of ASPD) on recidivism in a sample of 1354 juvenile offenders (Wojciechowski, 2020). The researcher followed up with juvenile offenders for over seven years after adjudication. The researcher used records of re-arrest obtained over the seven years subjects were under observation. ASPD was measured with a personality assessment inventory; self-control was measured with the Weinberger adjustment inventory; hostility was measured with a brief symptom inventory; the researcher used the control group to compare with participants. The study established that ASPD was a predictor of recidivism, it also reported that self-control, but not hostility was the underlying risk factor of recidivism (Wojciechowski, 2020). The researcher used a large sample to answer a research question; moreover, valid, and reliable measures to assess re-offending were used; however, the DSM-5 diagnostic criteria of ASPD stipulates that "the individual is at least 18 years" (Criterion B) (APA, 2013, p.659). Wojciechowski (2020) used a sample group limited by age; therefore, this result could not be generalized to other offenders clinically diagnosed with ASPD. However, Wojciechowski's results were consistent with previous studies that maintained that individuals with ASPD recidivate following low self-control (DeLisi et al., 2018).

Swogger et al. (2014) argued that low self-control such as impulsive aggression was a hostile response to frustration; therefore, it could not be used to predict criminal recidivism. However, the researchers acknowledged that premeditated aggression predicted recidivism. The researchers reached the conclusion following a study on impulsive and premeditated aggression. The researchers assessed 91 adults in pre-trial diversion program. Offenders volunteered to participate in the study and completed self-reports. The researchers used impulsive-premeditated aggression scales (IPAS) to measure aggression. A major limitation to the study by Swogger et al. (2014) was the fact that researchers needed to have a control group, a group that was not on pre-trial diversion program. The researchers should have considered that some of the statements on the IPAS might have led to participant's bias. Some of the statements on the scale were "I felt my outburst were justified"; "I was in control during

the aggressive acts”; “when angry, I act without thinking”; “I was in a bad mood the day of the incident” (Kockler et al., 2006, p.83). In addition, the researchers used convenient sampling. A study by Swogger et al. (2014) suggested that it was reasonable to conclude that aggression was associated with reoffending among those with ASPD and psychopathy diagnosis.

Antisocial Personality Disorder (ASPD) and Violent Crimes

Shepherd et al. (2018) reported that offenders with ASPD diagnosis were less likely to commit violent crimes repeatedly. The authors’ conclusion was without warranting; therefore, further work is required to investigate the impact of ASPD on violent crimes. According to Romero-Martinez and Moya-Albiol (2018), impulsivity (criterion A3 of ASPD) is associated with violent crimes. The researchers further explained that the mechanism of committing violent crimes was that impulsivity affect emotional decoding, which was a pre-requisite for emotional and behavioral regulation. When an individual was unable to regulate emotion or behavior, sensitivity was reduced; consequently, they were likely to commit violent crimes (Romero-Martinez & Moya-Albiol, 2018). Similarly, Falcus and Johnson (2018) investigated a relationship between violence and ASPD to enable clinicians to assess the risk. The objective of the study was to guide treatment towards reducing recidivism among individuals with ASPD. The findings indicated that individuals with ASPD were unable to regulate their emotions; therefore, they engaged in violent crimes. Related ideas were presented by Levin and Fox (1985), who introduced the terms “compartmentalization” and “dehumanization”. By compartmentalization, the researchers referred to an instance where an individual with ASPD lacked guilt after committing violence. Furthermore, such individuals lacked warmth for people who were not related to them. However, dehumanization refers to the offender’s ability to dehumanize and consider others as less of human beings. Levin and Fox (1985), Romero-Martinez and Moya-Albiol (2018), and Falcus and Johnson (2018) extended knowledge in the field of ASPD and violent crimes. Considering the literature presented, it is plausible to conclude that a positive relationship exists between ASPD and violent crimes. This implies that ASPD is a predictor of violent crimes.

Lowenstein et al. (2016) suggested that to increase accuracy with the assessment of risk factors of violent crimes, the traits of Cluster B personality disorders (antisocial, borderline, histrionic, and narcissistic personality disorder) should be prioritized since symptoms of Cluster B personality disorders overlap. Four traits were identified in Cluster B personality disorders and linked with violent crimes; namely, (1) impulse control, (2) affect regulation, (3) threatened egotism, and (4) paranoid tendency (Nesto, 2002). In addition, anger, aggression, and violence were linked with Cluster B personality disorders. From the Cluster B personality disorders, ASPD was found to be related to violent crimes such as physical assault and victimization. Lowenstein et al. (2016) demonstrated that the traits of impulsivity and aggressiveness correlated with persistent violence. Shorey et al. (2011) measured the impulse control, anger and acts of violence of 80 female inmates. The aim of the investigation was to examine the association between impulsivity, traits of anger and aggression. Findings indicated that impulsivity predicted physical aggression and anger. The presented literature showed that there was existing literature indicating that impulsivity was linked with violence

among those diagnosed with ASPD (Freestone et al., 2012; Romero-Martinez & Moya-Albiol, 2008).

Antisocial Personality Disorder (ASPD) in a South African Prison

Naidoo and Mkize (2012) interviewed 193 prisoners in Durban, South Africa, using the mini-neuro psychiatric interview, a screening questionnaire, and a demographic questionnaire. The study found that there was a high prevalence of mental disorders among the prisoners. Furthermore, findings showed that 46.1% were diagnosed with an ASPD. Similarly, Loots and Louw (2011) reported that antisocial and psychopathic personality traits indicated a corresponding prevalence to those found in international studies. A large and growing body of literature has investigated the impact of psychopathic traits and ASPD on recidivism (Caputo, 2004; Harris et al., 1994; Harris et al., 2001; Hemphill, 1991; Liem et al., 2014; Loots & Louw, 2011; Louw & Loots, 2012; Walsh & Kosson, 2007).

Psychopathy, Recidivism, and Violent Crimes

Psychopathy was first introduced to psychiatry as a personality disorder that described patients who could not be classified as psychotic (Cleckley, 1988). Psychopathy affects one's interpersonal, affective, and behavior or lifestyle (Colins et al., 2020). Symptoms which distinguished a psychopath from an ordinary person included "superficial charm, absence of anxiety, guiltlessness, dishonesty, unreliability, failure to form intimate personal attachments and poor self-control (Lilienfeld et al., 2016, p.68). Similarly, other traits used to describe psychopathy included "lack of affiliative capacity, deficient empathy, explosiveness, aggressive, cruel, arrogance, and antagonistic" (Fowles, 2018). Taking into consideration the traits of psychopathy presented in various literature, Hare (1993) concluded that psychopathy was linked with criminal behavior. Moreover, psychopaths' relapse in criminal behavior more frequently than other criminals (Laurell & Dåderman, 2005). To diagnose psychopathy clinically, Hare (1980) used a psychopathy checklist (PCL) which was later revised to PCL-R. The antisocial behavior subscale on the PCL-R enabled Hare to predict psychopathy's offending tendencies. To test the predictive validity of the PCL-R, Mokros et al. (2014) carried out a meta-analysis in German-speaking countries. The findings of the study showed that PCL-R could predict violence among psychopaths. Mokros et al.'s (2014) meta-analysis enabled policymakers, academics and clinicians to consider psychopathy as a predicting factor of violent crimes. However, the findings made it difficult to generalize to other countries beyond Germany. For instance, the PCL-R did not predict violent recidivism among Latino American offenders (Anderson et al., 2018).

Research indicated that psychopaths tended to commit violent and aggressive crimes (Babiak & Hare, 2006). Psychopaths' tendency to engage in violent crimes was associated with their proneness to focus on short-term goals (Buckholtz et al., 2010). Hare (1993) pointed out that psychopaths made up a larger percentage of offenders sentenced for murder, sexual assault, theft, domestic violence, white collar crimes, child abuse, organized crimes, and terrorism. Furthermore, Babiak and Hare (2006) reported a positive relationship between psychopathic criminals and recidivism. Psychopaths recidivate at a much higher rate compared to ordinary criminals (Burt et al., 2016). A study which examined the relationship between recidivism and psychopathy was reported by Serin and Amos (1995). The researchers used a sample of 300

offenders and assessed psychopathy with PCL-R. The findings demonstrated that psychopathy predicted the probability of recidivism. Laurell and Dåderman (2005) measured psychopathy and recidivism amongst 35 men convicted of homicide using the PCL-R. The findings indicated that the relationship between psychopathy and recidivism was positive. Likewise, Långström and Grann (2002) examined the link between psychopathy and recidivism on young offenders using the PCL-R. The study reported that psychopathy was a predictor of recidivism. The three studies presented (Laurell & Dåderman, 2005; Langstrong & Grann, 2002; Serin & Amos, 1995) showed that the PCL-R was a valid measure of psychopathy. Moreover, findings from the studies were adequate to conclude that psychopathy was a strong predictor of recidivism.

Sadism, Recidivism, and Violent Crimes

The Oxford English Dictionary (2006, p. 907) defines sadism as “the desire to gain sexual or other pleasure from hurting or humiliating other people”. Likewise, O’Meara et al. (2011) described sadism as a personality trait characterized by gaining gratification from other people’s suffering. Overall, sadism was conceptualized as an experience of pleasure on the expense of other people’s pain (Chester et al., 2019). By defining sadism, researchers and clinicians attempted to explain the behavior and cognitive reasoning of those who experienced inappropriate affect after engaging in violent crime (Buckels et al., 2013). A perpetrator’s perception of a heinous act informed the clinician’s diagnosis of sadism. Sadists enjoy inflicting harm on others. Compared to other offenders motivated by criminogenic needs to commit crime, sadists were motivated by intrinsic drive (Buckels et al., 2013). This evidence suggested that sadists’ intention was gaining pleasure not goods (Baumeister & Campbell, 1999). Sadists used aggression when inflicting pain on others; therefore, aggression was a predictor of sadism (Chester et al., 2019). Sadists directed their aggression toward both innocent people and those who provoked them. This evidence suggested that a sadist was likely to display both reactive and proactive aggressive behavior. Reactive aggression was described as an immediate behavioral response to threats or physical aggression; in this case, sadist became impulsive and failed to control their impulses. However, proactive aggression referred to a circumstance wherein a sadist inflicted pain motivated by the anticipation of internal reward (Chester et al., 2019). Proactive aggression was linked with instrumental/premeditated aggression. This indicated that sadists were capable of logically planning to inflict pain without any form of provocation (James et al., 2020).

Research on aggressive behavior and sadism reported that the aggressive act exerted by sadists was linked to the experience of pleasure (Chester et al., 2019). An opponent-process model proposes that the following was related to the reason sadists experienced pleasure from aggressive acts (1) seeking thrills and reducing boredom, (2) threatened egotism, and (3) seeking sensation (Baumeister & Campbell, 1999). A vast majority of research on sadism reported that sexual crimes were motivated by sadism (Berger et al., 1999; Eher et al., 2016; Hamilton & Rosen, 2016; Healey et al., 2013; Hill et al., 2006). Sexual sadists are aroused by sexual activities involving infliction of pain and humiliation (Foulkes, 2019). Like psychopaths, sadists lacked remorse; therefore, they were likely to reoffend. Eher et al. (2016) carried out a nationwide survey among sexual offenders. The study showed that the diagnosis of sexual

sadism was prevalent among 9.9% of the sexual offenders. The findings suggested that some sexual offenders who engaged in sexual assault were motivated by sadism. To evaluate whether sexual sadism was related to violent re-offending, Eher et al. (2016) interviewed adult male sexual offenders. Researchers reported a positive link between sexual sadism and violent recidivism. Similarly, Kingstone et al. (2010) reported a positive link between sexual sadism and violent reoffending. Sexual sadists' recidivism tendencies might be explained by the internal reward gained. Overall, presented literature on sadism justified that sadism was related to violent recidivism.

Machiavellianism, Recidivism, and Violent Crimes

Machiavellianism is a type of personality wherein individuals attain goals by deceit tactics and manipulation (Lyons, 2019). Like psychopathy, narcissism, and sadism, Machiavellianism has low levels of agreeableness and low conscientiousness (D.N Jones, 2016). Traits of callousness and lack of empathy were associated with Machiavellianism (Jones & Figueredo, 2013). Moreover, Machiavellianism studies reported a positive relationship between Machiavellianism and lack of remorse (Murphy, 2012). Machiavellian individuals were cautious, this suggested that Machiavellianism was not associated with impulsivity and risk-taking (Jones & Paulhus, 2011). Taking into account traits associated with Machiavellianism and those ruled out, it was plausible to conclude that Machiavellian individuals were less likely to engage in crimes associated with the following: "(a) impulsivity (petty theft, drug-related crimes) (b) Emotionality (crimes of domestic violence) (c) social pressure (drug use, vandalism) (d) ego-threat (response to threat and anger) (e) sadistic desires (internet bullying) (f) deficit in impulse control (sexual assault) (g) low socioeconomic status (robbery)" (D.N Jones, 2016, p. 91). Moreover, literature showed that Machiavellian individuals were likely to engage in crimes of opportunity such as financially based crimes. Financial crimes required caution. Machiavellianism was found to be a disposition for those who engaged in financial crimes (D.N Jones, 2016). Carre et al. (2020) examined whether Machiavellian individuals were likely to commit fraud than the general population without Machiavellianism traits. Findings of the study confirmed that Machiavellianism was a predictor of financial crimes; for instance, Machiavellian individuals were less likely not to report embezzlement in the workplace if the act benefitted them, bridge contracts at work for financial benefits or prolonged work unnecessarily to gain overtime compensation (Zagenczyk et al., 2013).

There was literature indicating that Machiavellian individuals were effective in leadership, specifically in business (Evans, 2013; Hawley et al., 2007; Zeigler-Hill et al. 2014). It was believed that Machiavellian individuals might serve the interest of others while serving their own interest. In contrast, Zettler and Solga (2013) argued that Machiavellianism was linked with poor business planning. Rauthmann and Kolar (2012) also argued that Machiavellian individuals were destructive in nature. Den-Hartog and Belschak (2012) suggested that Machiavellian individuals should not be in leadership roles considering that it was detrimental to subordinates. Overall, presented literature highlighted conflicting findings; however, studies agreed that Machiavellian individuals were likely to recidivate, but they were less likely to engage in violent crimes.

Narcissism, Recidivism, and Violent Crimes

When considering the influence of narcissism on recidivism, it was important to distinguish between adaptive and maladaptive features of narcissism. Adaptive features were mainly related to social adaptation and high self-esteem. Socially adaptable individuals were likable in a social setting (Campbell & Campbell, 2009). Maladaptive features included grandiosity, impulsivity, and self-conscious emotions. A considerable amount of literature has reported that maladaptive features of narcissism were positively linked with criminal behavior (Lobbestael et al., 2014; Reidy et al., 2010; Widman & McNulty, 2010). Zerach (2016) examined cyberbullying to predict pathological narcissism among adults. Cyberbullying was related to grandiose narcissism. The DSM-5 diagnostic criteria of narcissism personality disorder indicated that narcissists were preoccupied with “unlimited success and power” (APA, 2013, p.669). This evidence suggested that by bullying their victims online, grandiose narcissist felt empowered. Grandiosity narcissism was linked with criminal recidivism when an individual diagnosed with narcissism lied, cheat, and stole repeatedly to satisfy their own interest. O’Reilly and Doer (2020) indicated that such individuals were in leadership roles within organizations.

Research showed that narcissistic individuals tended to commit white collar crimes such as corporate fraud, embezzlement and Ponzi schemes repeatedly (Blickle et al., 2006). This suggested that there was a positive relationship between narcissism and recidivism. In addition, traits of narcissism, i.e., “grandiosity, self-confidence, impulsiveness, an inflated view of one’s abilities, a sense of entitlement, low social empathy and willingness and ability to use others to achieve one’s own interest” (APA, 2013, p. 669) were linked with recidivism (O’Reilly & Doer, 2020). Although extensive research has been carried out on narcissism and criminal behavior, studies that adequately showed how narcissism was associated with violent crimes were limited. For instance, only one study that examined the relationship between narcissism and aggressive sexually coercive behavior was found. The study reported that when narcissists’ sexual advances were rejected, they were likely to use aggression (Blinkhorn et al., 2015). Aggression was found to be a maladaptive response to emotional discomfort (Velotti et al., 2020). Further research to address the shortfall on the association between narcissism and violent crimes was recommended (Blinkhorn et al., 2016).

Conclusion

The literature review highlighted the relationship between personality disorders (ASPD, psychopathy, narcissism, sadism, and Machiavellianism), recidivism and violent crime. Research has shown that there was a positive relationship between personality disorders and recidivism; however, there were conflicting findings with regard to the relationship between personality disorders and violent crime. Research findings showed that although some personality disorders were related to violent crime, some personality disorders were not associated with violent crime (Babiak & Hare, 2006; Blinkhorn et al., 2015; Falcus & Johnson, 2018; D.W Jones, 2016; Levin & Fox, 1985; Romero-Martinez & Moya-Albiol, 2018; Shepherd et al., 2015). It was further observed that researchers have not reached a consensus regarding whether the PCL-R was a valid measure of recidivism. Researchers in the field of psychology used various measures to establish the relationship between personality disorders,



recidivism, and violent crime. Conflicting ideas were presented regarding the relationship between aggression, impulsivity, and recidivism.

CHAPTER 3: RESEARCH METHODOLOGY

Introduction

The current chapter highlights the method found to be suitable to answer the research question and the efficiency of the chosen method. The research process and the methodology's aim are explored. Furthermore, the chapter highlights the formulation of the problem, collection of data, evaluating, analyzing, and interpretation of the data. Ethical guidelines considered during the research process are discussed. In conclusion, the soundness of the current review and dissemination of the outcomes is explored.

Research Design: The Systematic Review

Systematic reviews were first recognized as a knowledge synthesis strategy because they cohesively consolidated evidence-based findings. The present systematic review investigated the complex relationship between personality traits, recidivism, and violent crime. In addition, this study aims to add to the literature on the etiology of recidivism in relation to personality traits.

Systematic reviews are considered secondary level analysis because they bring together findings from primary studies. A systematic review reviews existing research, using explicit, accountable, rigorous research methods (Gough et al., 2017). In other words, systematic reviews are rigorous analyses of what is already known. Systematic reviews are an effective methodology/strategy that integrates, appraises and synthesizes primary studies (Petticrew & Roberts, 2006) and existing information.

When faced with conflicting findings or findings that are not replicable, policymakers and professional practitioners can find it difficult to understand the overall picture of the phenomenon of interest being researched (Siddaway et al., 2018). Moreover, important questions meant to be used in decision-making remain unanswered. Individual studies cannot be relied upon because they are not definite (Siddaway et al., 2018). However, systematic reviews, might be accepted as basic units of knowledge considering that they were comprehensive, methodical, explicit, transparent, and use unbiased techniques (Siddaway et al., 2018). Systematic reviews reduced many articles published into manageable information (Mulrow, 1994). Findings from a systematic review provide data which could be used to inform decision-making (Petticrew & Roberts, 2006).

Systematic reviews generate a large quantity of information which requires good information management (Siddaway et al., 2018). Gough et al. (2017) asserted that a systematic review applied a rigorous methodology in which the following general steps were conducted, i.e., formulation of the research question, identifying and describing relevant studies, critically appraising studies and synthesizing knowledge gathered from reports. Gough et al. (2017) proposed that the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) was an appropriate tool for a researcher to account for all the studies. The PRISMA diagram summarizes the reasons studies were either included or excluded. According to Pati and Lorusso (2017), the PRISMA diagram was an evidence-based guideline. Systematic reviews follow a particular sequence: (1) inclusion and exclusion criteria are developed, (2) studies are searched throughout database, (3) studies are screened based on titles and abstracts, (4) included studies are screened based on full report, and (5) studies are synthesized and assessed for quality (Gough et al., 2017).

The current study utilized a systematic review methodology to investigate the complex relationship between personality traits, recidivism, and violent crimes to clarify the significance of Dark Tetrad personalities and ASPD in relation to violent crimes and recidivism.

Conducting a Systematic Review

According to Pati and Lorusso (2017), the process of conducting a literature search, filtering search results, analyzing and evaluating the quality of studies, interpreting findings and finally reporting findings, needed to be systematic. Formulating a review question, locating studies, selecting studies, first reading of studies and identifying and extracting findings were processes followed when conducting a systematic review.

Systematic review method

The following section describes the steps which were taken to conduct the current systematic review.

Formulating the Research Question

A research question that is clear, provides relevant and useful findings (Pati & Lorusso, 2017). In a systematic review, a review question is wrong if it does not target what the reviewer aims to establish (Petticrew & Roberts, 2006). Furthermore, Petticrew & Roberts (2006) identified the following four conditions that might rule out the use of systematic review methods: (1) when a systematic review was found to be irrelevant in answering the research question; (2) if there was already an updated/recent systematic review in interest, (3) if there was a researcher currently conducting the same systematic review and (4) when the research question was vague.

Locating Studies

Relevant studies are commonly located from online databases, moreover, literature searches rely on different sources and approaches such as: bibliographic database searches, hand searching, reviewing sources of grey literature, and reference harvesting (Littell et al., 2008). Bates et al. (2007) developed a systematic map technique which enabled a researcher to access a large body of literature related to the topic (Littell et al., 2008).

Selecting Studies

To select studies, eligibility criteria are used – meaning that only studies that meet the criteria are selected. Studies are first selected based on their titles and abstracts (Gough et al., 2017). The reviewer retrieves the full text of the studies that were found to be relevant following the reading of the abstract. The reviewer will then read through the full text of all the studies and decided whether the study should be included or excluded. The reviewer is expected to include studies even though they did not report the reviewer's desired outcomes (Pati & Lorusso, 2017). Tricco et al. (2011) argued that if a review was limited to studies with desired outcomes, such a review risked being subject to bias. When selecting studies, a single citation might appear on different databases; therefore, it is necessary for duplicates to be eliminated (Littell et al., 2008).

First Reading of Studies

Studies included in the review are read repeatedly to familiarize the reviewer with the content of the study. Moreover, by going through studies repeatedly, different recurring themes were recorded. The process of reading through studies clarified whether all the included studies should be synthesized or not.

Identifying and Extracting Findings

Data extraction refers to the procedure of extracting relevant information from all included studies. This process is completed either by entering data directly into a database or a table (Petticrew & Roberts, 2006). Hughes et al. (2009) assert that it is crucial to identify all statements in a report that constitute a finding. By extracting data from reports, a researcher could identify information from studies, such as sample characteristics, research design, outcome measure, and data collection methods (Littell et al., 2008).

The research process: Applied methodology and method

In the current section, the steps of research process and how they were applied on the current study are described.

Formulating the Research Question

On the current study, the research question emerged from observing high prison population rates as reported by the South African Department of Correctional Services (2019). In addition, South Africa was ranked first in Africa in terms of high crimes rates (World Prison Brief, 2019). Such high rates of crime and prison population served as a motivation to consult literature on the relation between personality traits, violent crime, and recidivism. By consulting studies in qualitative and quantitative methods, it was observed that there was a large volume of published primary studies. Instead of contributing another primary study on the topic, synthesizing existing studies was considered. Challenges with conducting systematic reviews as mentioned earlier by Forsyth et al. (2014) were considered. Fortunately, the researcher had no financial ties with any institution that might be affected by the results. After perusal of the existing body of knowledge, it was decided that the research question would be formulated as: What would a systematic review clarify about the significance of Dark Tetrad and ASPD in relation to violent crimes and recidivism?

Locating Studies

Locating studies required the use of keywords strings and Boolean operators across various databases. Three different strategies were used to search for literature: (1) A keyword search was conducted across several online databases; to avoid missing relevant studies, the following keywords were used: “recidivism”, “psychopathy”, “sadism”, “narcissism”, “Machiavellianism”, “antisocial personality disorder”, and “violent crime”; (2) Reference lists of previous studies on antisocial and Dark Tetrad personality traits in relation to violent criminal recidivism were consulted; and (3) Hand searches were carried out on leading journals in the field. The following databases were used: APA PsycInfo, Medline, APA PsycArticles, Academic Search Complete, and Criminal Justice Abstracts.

Selecting Studies

The following eligibility criteria were developed to ensure that relevant studies were included:

1. Offenders with antisocial and Dark Tetrad personality traits as participants.
2. Research must have sampled adults with personality traits.
3. Measurements of recidivism included here were re-arrests, re-offending, re-conviction, and re-incarceration.
4. Studies that did not include interventions were excluded.
5. Grey literature was excluded.
6. English published studies from 2004 onwards were included.

7. Studies investigating recidivism and other mental disorders were excluded.
8. Research must have been published in peer-reviewed journals.
9. Studies that compared offenders with dark personality traits to offenders without dark personality traits.

A discussion of each of the above criteria follows.

Criterion 1: States that studies with offenders with antisocial personality traits and Dark Tetrad personalities were included. The rationale behind this criterion was that reliable data could only be obtained from those with personal experience of the issue (Brown, 2006).

Criterion 2: Indicates that research must have sampled adult individuals with personality traits. It was considered that personality disorders such as ASPD was diagnosed in adulthood (APA, 2013).

Criterion 3: Stipulates that the measurement of recidivism included here was re-arrest, re-offending, re-conviction, and re-incarceration. Maltz (1984) argued that re-arrest only could not be used as an indicator for recidivism. He suggested that the operational definition must be applied since it included the following: (1) re-offending, which referred to a relapse into criminality; (2) re-arrest, where an offender was rearrested for the same or different offence; (3) re-incarceration, a situation where a parolee broke the conditions of parole and returned to prison; and (4) re-conviction, where an ex-offender was convicted in court repeatedly.

Criterion 4: Indicates that this study did not include interventions and focused on the cause and effect of personality traits and recidivism.

Criterion 5: States that grey literature should be excluded from the study, Paez (2017) asserted that sources from grey literature lack scientific rigor; moreover, they reduced the validity of results.

Criterion 6: Indicates that that only studies published from 2004 onwards will be included. The researcher attempted to focus on studies published recently.

Criterion 7: States that studies investigating recidivism and other mental disorders were excluded. There were existing published systematic reviews on recidivism and other mental disorders (Bonta et al., 1998; Fazel & Yu, 2011).

Criterion 8: States that research must be published in a peer-reviewed journal. Peer review refers to submitting an author's scholarly work to other authors who are considered experts in the field. By submitting work for peer review, authors publish high quality articles, the motivation for this is that studies with low quality have become prevalent; therefore, peer reviewing is a solution (Kelly et al., 2014). The current review aimed to only make use of high-quality studies.

Criterion 9: Compares offenders with personality traits with those of the general offender population. The rationale behind this criterion is that by comparing offenders with personality disorders with those without, the researcher would have an opportunity to compare recidivism rates and conclude whether personality traits were a contributing factor.

Table 1: List of studies used in the systematic review

Authors	Year	Study title	Sample	Findings
1. Martin, Zabala, Del-Monte, Graziani, Aizpurua, Barry, & Ricarte	2019	Examining the relationship between impulsivity, aggression, and recidivism for prisoners with antisocial personality disorder.	N= 100 50 inmates with ASPD 50 inmates without ASPD	Impulsive aggression is associated recidivism amongst offenders with ASPD. Furthermore, premeditated aggression is associated with recidivism amongst those with psychopathic traits.
2. Sohn, Raine, and Lee	2019	The utility of the psychopathy Checklist-Revised (PCL-R) facet and item scores in predicting violent recidivism.	N=445 353 violent recidivists 92 non-violent recidivists	Psychopathic traits predict violent criminal recidivism.
3. Walters	2012	Psychopathy and crime: Testing the incremental validity of PCL-R measured psychopathy as a predictor of general and violent recidivism	N=320 198 nonsexual offenders 122 nonsexual offenders undergoing forensic evaluations	Psychopathy measure (PCL-R) is not a valid predictor of violent and non-violent recidivism
4. Sherretts, Boduszek, Debowska, Willmott	2017	Comparison of murderers with recidivists and first-time incarcerated offenders from U.S prisons on psychopathy and identity as a criminal: an exploratory analysis	N=478 94 Opportunistic murderers 266 Recidivists 118 first time offenders	Murderers are not motivated by psychopathic traits. Murderers kill because they lack social ties with people and therefore disregard the life of others.
5. De Barros and De Padua Serafim	2008	Association between personality disorder and violent behavior pattern.	N=51 11 Patients with ASPD 19 Patients with borderline personality disorder 21 patients without personality disorder	Patients with ASPD are likely to engage in violent crime.
6. Zabala Banos, Criado-Alvarez, Lopez-Martin, Martinez-Lorca, Jimeno-Jimenez, and Ricarte-Trives	2019	Functioning of psychopathy and trait aggression as predictive variables of criminal recidivism	55 offenders with psychopathic traits 55 offenders without psychopathic traits	Psychopathy was found to be related to aggression.

First reading of studies

For the present study all six studies were read through repeatedly. By perusing the studies numerous times, familiarity with the studies was gained; furthermore, themes that emerged throughout the dataset were acknowledged.

Identifying and extracting findings

After reading the studies multiple times, identified findings of the studies were included. Findings were extracted from all the studies and a table was used to layout the findings. In the current context, the findings were “data-driven and integrated discoveries, judgements or pronouncement which a researcher offer about a phenomenon” (Hughes et al., 2009 p. 1142). Identifying information, sample characteristics, and outcomes were recorded. The review was conducted, and the extraction of studies was completed by a single researcher.

Abstracting Findings

According to Hughes et al. (2009), abstracting findings is the process of summarizing or reducing findings to a form that represents their essence. The reduced data is prepared for interpretation. Further, Hughes et al. (2009) highlight that researchers might use the author’s original words to maximize clarity. Therefore, in the current study, the original words of authors were used when abstracting findings. Themes that emerged were revisited several times to understand how the themes overlapped with each other. After reading the studies repeatedly, the following themes emerged: offender’s dysregulation of emotions, psychopathy as a strong predictor of recidivism, and traits influencing violence. All the themes that emerged from studies were found to appear in most of the studies; therefore, no theme was abandoned.

Soundness of Research

In systematic reviewing, researchers interact with many published studies; therefore, a question of the quality of the studies remain. With primary studies, researchers are expected to be rigorous in methodology, and the same expectation is extended to researchers of systematic reviews (Gough et al., 2017). To ensure a quality study, data appraisal was conducted by the researcher and subjected to the inspection of a supervisor. Moreover, the eligibility criteria also contributed to the soundness of the study.

Credibility and Transferability

Guba and Lincoln (1985) remind researchers that every systematic review must address the issue of credibility and transferability. According to De Vos (2005), credibility refers to demonstration that the inquiry was conducted in such a manner as to ensure that the studies was accurately identified and described. To ensure credibility, this study was presented to the researcher’s supervisor so that both the researcher and supervisor might reach a common ground in terms of interpretations. To ensure transferability, the researcher followed the methodological framework of systematic reviews to demonstrate that the data was collected and analyzed according to the standards of systematic reviews.

Ethical Consideration

When reviewing the literature, the study’s soundness did not only involve ensuring that high quality studies were used, but it also demanded that studies be dealt with ethically. Ethics refers to the appropriateness of the researcher’s behavior in relation to the rights of those who become the subject of the research or who are affected by it (Wincup, 2017). In a systematic review, a plethora of information is synthesized scientifically by searching out and

objectively analyzing related studies, and the question of ethics is rarely touched (Wincup, 2017). Authors whose ideas, data, and original materials were used were acknowledged through citations (Wager & Wiffen, 2011). As much as those who contributed to the literature were acknowledged through citations, the same applied to those who contributed financially to the research project (Wager & Wiffen, 2011). The current research project was not funded by any institutions; therefore, the researcher did not have any conflict of interest and the results were not biased.

Dissemination of Research Results

It is envisaged that the current study's results be disseminated to the Department of Corrections and Justice, in a published format. The study's findings may be used as guidelines in the South African context to identify recidivism in relation to dark personality presentation and ASPD.

CHAPTER 4: FINDINGS

Introduction

Thematic analysis was used to analyze the identified studies within the present research. Thematic analysis identifies and describes implicit and explicit ideas within a dataset (Guest et al., 2012). Thematic analysis allows the researcher to derive explanations from identified studies, i.e., it is a method that brings together different research findings (Gough et al., 2017). The researcher followed three steps in applying thematic analysis i.e., step one, read verbatim studies; step two, identify possible themes; lastly, compare and contrast themes and identify structure among them (Guest, MacQueen, & Namey, 2012).

Identified studies were read and three themes and sub-themes emerged (see Figure 3). Theme 1 described that emotional dysregulation was a central factor to recidivism. Theme 2 described that psychopathy predicted recidivism. Theme 3 described that certain traits played a major role in acts of violence. The identified themes are discussed in sequence. First, the offender's dysregulation of emotions is discussed; second, the psychopathic traits being a strong predictor of recidivism is then discussed; third, the personality traits influencing violence are discussed.

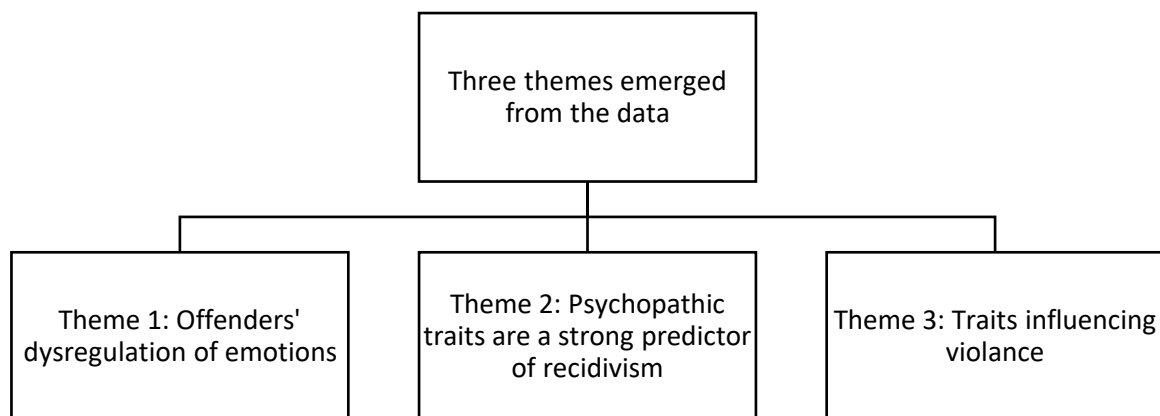


Figure 3: Visual presentation of the three themes that emerged from the data

The themes are discussed separately as they emerge. However, discussion of the themes separately does not imply that the themes are separated. After repeated reading of all the studies, it was observed that the themes overlapped with each other. In the beginning, it might appear unclear how themes overlap with each other, but as findings are discussed in detail, it will become clearer (See Figure 4).

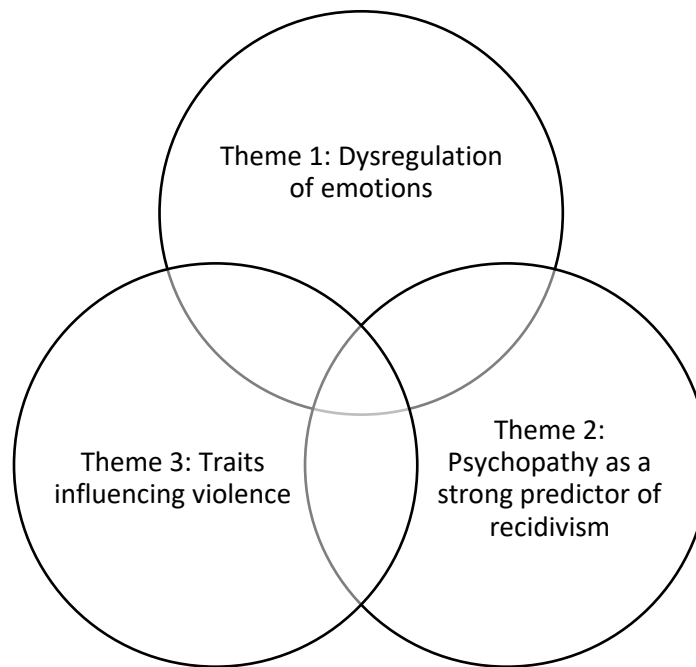


Figure 4: Representation of the overlapping relationship between the three themes.

Theme 1: Offenders' dysregulation of emotions

Emotional dysregulation refers to patterns of emotional expression that interfere with individuals' functioning and goal-directed activity (Thompson, 2019). Aggression and impulsivity emerged as sub-themes. In the context of the current study, emotional dysregulation refers to offenders' aggressive and impulsive responses which leads to recidivism, emotional dysregulation emerged in various studies as factors influencing offenders' participation in criminal behavior repeatedly. Studies conducted by Martin et al. (2019), Zabala-Banos et al. (2019), and De Barros and Serafim (2008) show that offenders with ASPD and psychopathy fail to inhibit or subdue emotional reactions; therefore, they were prone to recidivism. Martin et al. (2019) used the Barrat impulsivity scale and impulsive/premeditated aggression scale to measure recidivists with and without ASPD. Most offenders with ASPD presented with symptoms of impulsive aggression. This evidence suggested that impulsive aggression was central to offending and re-offending. Recidivism occurred when impulsive aggression took over on those clinically diagnosed with ASPD. The study by Martin et al. (2019) showed that 73% of recidivists were unable to keep their affect at tolerable levels. Moreover, the study revealed that attentional impulsivity contributed to recidivism. This result suggested that recidivism was positively linked with emotional dysregulation.

Likewise, Zabala-Banos et al. (2019) provided some clues regarding emotional dysregulation and criminal recidivism. The researchers measured 100 offenders with impulsive-premeditated aggression scale. In the study, offenders scored high on traits of aggression, anger, hostility, physical and verbal aggression and premeditated aggression. This evidence suggested that emotional dysregulation was central to most participants.

De Barros and Serafim (2008) described how dysregulation of emotions was a contributing factor of violent behavior among patients diagnosed with personality pathology. The researchers assessed 11 patients clinically diagnosed with ASPD and compared them with 19 patients diagnosed with borderline personality disorder. The eligibility criteria required patients to have records of violence, aggressive behavior and law-breaking. Further, the study showed that offenders with ASPD presented with cold temperament which suggested that they engaged in instrumental aggression. In this study, emotional dysregulation occurred when participants were found to engage in episodes of physical violence and aggression.

Theme 2: Psychopathy is a Strong Predictor of Recidivism

A recurrent theme in the studies was the sense that psychopathy was a strong predictor of recidivism (Martin et al., 2019; Zabala-Banos et al., 2019; Sohn et al., 2019, Sherretts et al., 2017; Walters, 2012). Traits associated with psychopathy included glib and superficial, egocentric and grandiose, lack of remorse and empathy, deceitful and manipulative, shallow emotions, impulsivity, poor behavior control, lack of responsibility, and antisocial behavior (Hare, 1993). Martin et al. (2019) measured psychopathic traits with the Triarchic psychopathy measure. The study concluded that psychopathy was central to recidivism. Furthermore, the study explained that offenders with psychopathic traits are prone to meanness, disinhibition and boldness. Likewise, a study by Zabala-Banos et al. (2019) used a sample of 55 inmates with and 55 without psychopathic traits. The researchers used the Triarchic psychopathy measure. Many offenders in the study were sentenced for crimes such as murder. The study showed that traits of meanness and disinhibition were associated with psychopathy; based on those traits, the study concluded that psychopathy was related to recidivism. It was pointed out that “Meanness is the only psychological variable of the measure used in our research that predicted inmates’ recidivism” (Zabala-Banos et al., 2019, p. 368). Offenders in the study presented with various socio-demographic factors that might have contributed to reoffending; for instance, offenders’ highest level of education was either primary or secondary school. Moreover, offenders had criminal histories, violence-related attitudes, and the presence of psychopathology (Zabala-Banos et al., 2019).

The theme of psychopathy as a strong predictor of recidivism recurred in a study by Sohn et al. (2019). The study measured 353 violent offenders and 92 nonviolent offenders. Moreover, the study used the PCL-R to measure psychopathy and its capability to measure violent recidivism. The study revealed that not all four facets of the PCL-R were able to measure recidivism. For instance, Facet 2 (affective deficiency) which includes lack of remorse, shallow affect, lack of empathy, and failure to accept responsibility was found to be the strong predictor of recidivism compared to Facet 3 (unstable and deviant lifestyle) and Facet 4 (antisocial). Further, the study explained that Facet 1 (interpersonal) which encompassed superficial charm, grandiosity, lying, and manipulation was not associated with recidivism. Although Facet 4 (antisocial) which included poor behavioral control, early behavior problems, juvenile delinquency, revocation of conditional release and criminal versatility was identified as a predictor recidivism, the predictive validity on the antisocial facet was low. Walters (2012) measured two groups sentenced for violent and nonviolent crimes. The study used the PCL-R measure, the study’s finding showed that Facet 1 (interpersonal), Facet 2

(affective), and Facet 3 (lifestyle) were predictors of recidivism; however, Facet 4 (antisocial) was not a predictor of recidivism. Walters (2012) noted that the validity and reliability of the PCL-R as a measure of psychopathy was debatable.

In a study by Sherretts et al. (2017), the study's aim was to verify whether violent offenders such as murderers differed from other groups of offenders. In addition, the study investigated if psychopathy was central to crimes of murder. To measure psychopathy, the self-report psychopathy scale-short form (SRP-SF) was used. The study's participants were first-time offenders sentenced for murder and recidivists on non-violent crimes. It was revealed that murderers scored low on the psychopathy scale facet 1 (interpersonal) and facet 3 (lifestyle). Further, it was explained that murderers scored low on the lifestyle facet because they did not engage in criminal activities to support their lifestyle. Murderers scored low on the interpersonal facet because they lacked social ties with other people. The study showed that psychopathy was a predictor of general recidivism.

Theme 3: Traits Influencing Violence

Studies included in the review reported that certain traits predicted violence (Sohn et al., 2019; Sherretts et al., 2017; De Barros & Serafim, 2008; Zabala-Banos et al., 2019). Violence, which referred to behavior involving physical force intended to hurt or damage, was found to be associated with recidivism. A study conducted by Sohn et al. (2019) revealed that traits of psychopathy such as lack of remorse or guilt, lack of empathy, and failure to take responsibility were associated with violence. In De Barros and Serafim's study (2008), coldness of temperament was linked with violence. Moreover, the study highlighted that offenders with ASPD engaged in instrumental violence. Also, it was observed that offenders with ASPD engaged in violent behavior.

Sherretts et al. (2017) showed that violent crimes such as homicide were not rooted in psychopathic traits such as callous-unemotional. Consequently, study participants scored low on facet 2 (affective). A possible explanation that the researcher offered was that low scores on callous effect were associated with violent offending. This evidence suggested that callous unemotional was associated with violence. Zabala-Banos et al.'s study (2019) concluded that aggression was associated with violent crimes. The researcher reported that participants sentenced for murder or violent robbery had traits of aggression.

In summarizing the findings, the chapter on findings highlighted three major themes. Theme 1 described offenders' difficulty in regulating emotions. The identified studies revealed that offenders regulated emotions in an aggressive and impulsive style. Participants in the studies experienced impulsive aggression and instrumental/premeditated aggression. Aggression and impulsivity are traits of the Dark Tetrad and ASPDs. The identified traits also provided an understanding of which traits contributed to recidivism. Theme 2 conceptualized how among all the investigated personality traits; psychopathy was a strong predictor of recidivism. Findings from different studies differed in terms of which facet within the PCL-R was valid and which was not. Theme 3 spoke to traits that were associated with violence. Studies included in the review revealed that symptoms of psychopathy predicted violence. Aggression was also identified as a strong predictor of violent behavior. Even though the themes were discussed separately, each theme overlaps with the other. Theme 1 overlaps with Theme 3 since both



themes identified aggression as a dominating trait among participants in the included studies. In addition, both Theme 1 and 2 seemed to overlap with Theme 3 since emotional dysregulation and psychopathic traits result in violence.

CHAPTER 5: DISCUSSION

The present chapter's focal point is to process and give a summary of the study's main findings, in addition, this chapter will discuss how the findings interact with academic materials. Themes constructed from the data set are processed. Themes that surfaced as important issues repeatedly were identified throughout the dataset (Braun & Clarke, 2006). The chapter concludes with discussions on the study's limitations and areas for future research.

Main Findings

Three themes that overlapped with each other emerged from the findings as discussed in chapter four. Theme one spoke of offenders' dysregulation of emotions, i.e., offenders were aggressive and impulsive. Theme two described that psychopathy, which is one of the Dark tetrad personalities was found to be a strong predictor of recidivism. Theme three described that certain traits of antisocial personality disorder and psychopathy are related to violence.

Offenders' Dysregulation of Emotions

The purpose of conducting the current study was to review studies systematically with the aim of clarifying the relation between marked traits of Dark Tetrad and ASPDs, recidivism, and violent crimes. The analysis in Chapter 4 revealed that offenders with ASPD and psychopathy were unable to regulate emotions appropriately, i.e., they lacked the capacity to monitor, evaluate, and modify their emotional reactions when distressed. The finding suggests that, amongst the Dark tetrad personalities, psychopathy was found to be related to offender's dysregulation of emotions. Further, the analysis revealed that such offenders under-regulated their emotions, this meant that offenders had poor impulse control and behaved in an aggressive manner. Therefore, aggression and impulsivity were linked with recidivism. Offenders with poor emotion regulation were likely to recidivate.

The present study's findings were consistent with those of Swogger et al. (2014) who revealed that premeditated, but not impulsive aggression predicted violent recidivism. Even though the study reported findings on premeditated aggression and rejected the influence of impulsive aggression, it was encouraging to adopt the study's finding considering that the study revealed a similar theme of aggression. As mentioned, personality studies have long emphasized the role of aggression and impulsivity on recidivism (Arroyo & Ortega, 2009; Cooke, 2010; Walker et al., 2003). The present study's finding was significant because it explained how some offenders fail to benefit from rehabilitation programs. However, the findings did not support previous studies revealing that recidivism was caused by other factors other than personality traits (Ang & Huan, 2008; Kenny et al., 2001; Kingsnorth, 2006; Liem et al., 2014; Makarios et al., 2010).

Studies explaining the relationship between sadism and emotion dysregulation were not found. The literature review highlighted that sadists were aggressive in nature (Chester et al., 2019). A possible explanation for this result is that the investigation of sadism and emotional dysregulation is underdeveloped, Therefore, future studies, which focus on Dark tetrad personalities, specifically sadism and emotional dysregulation would need to be undertaken. In addition, studies associating narcissism and Machiavellianism with emotional dysregulation were not found. The finding was expected considering that the literature

review showed that there was only one study located which investigated narcissism and aggression (Blinkhorn et al., 2015). Regarding Machiavellianism, no evidence was found suggesting that Machiavellianism is associated with emotion dysregulation (Jones & Paulhus, 2011). The present study's findings produced results which corroborated the findings of previous studies mentioned in the literature review (D.N Jones, 2016; Campbell & Campbell, 2009; O'Reilly & Doer, 2020).

Psychopathic Traits are a Strong Predictor of Recidivism

The present study's research question sought to determine what the systematic review could clarify about the significance of Dark Tetrad and antisocial personalities in relation to recidivism. The present study found that from a group of Dark tetrad personalities, psychopathy, and its measure (PCL-R) was a strong predictor of recidivism. The finding was expected considering that the literature review highlighted that offenders with psychopathic traits were more likely to reoffend compared to offenders with other personality traits (Laurell & Dåderman, 2005). The present study's findings corroborated the ideas of Burt et al., 2016; Serin and Amos, 1995; Långström and Grann, 2002. Further, the present study revealed that the validity and reliability of facet 1 (interpersonal) and facet 4 (antisocial) required further investigation. A possible explanation for the discrepancy in the PCL-R facets might be that the PCL-R is not a self-report measure, but a clinical rating scale. The procedure is that a psychologist or psychiatrist must administer the PCL-R scale. The person being evaluated does not answer structured questions, rather a psychologist or psychiatrist conducts an in-depth interview and gives scores to the information gathered (Babiak & Hare, 2006). This means that offenders with psychopathic traits can use deceit in their responses. The present finding's implication provides clarity to the criminal justice system and forensic regarding which offenders are more likely to recidivate. Therefore, it is important for the criminal justice system to consider that offenders with psychopathic traits lack the ability to fear punishment. What is not clear is that studies associating other personality disorders such as narcissism, Machiavellianism and sadism with recidivism were not found. This finding was unexpected considering that it was mentioned in the literature review that narcissism, Machiavellianism, and sadism have a positive relationship with recidivism (Eher et al., 2016; Kingstone et al., 2010; O'Reilly & Doer, 2020; Murphy, 2012). Therefore, the current study's finding should be interpreted with caution. It is possible that the present finding was caused due to the available studies not meeting the eligibility criteria.

Traits Influencing Violence

The last theme revealed that certain traits of Dark tetrad personality and antisocial personality disorder predict violence. A compelling finding was that violence is a trait associated with psychopathy and ASPD (Sohn et al., 2019; De Barros & Serafim, 2008). The finding was expected since it was found through the literature review that psychopathy and ASPD were associated with violence. Also, it was expected to find that violence was not a trait associated with narcissism and Machiavellianism. The current study's findings match those observed in earlier studies (Babiak & Hare, 2006; Falcus & Johnson, 2018; Levin & Fox, 1985; Romero-Martinez & Moya-Albiol, 2018). A possible explanation for this finding might be the positive relationship that was established between aggression, psychopathy, and ASPD. This

evidence showed that the more offenders presented with aggressive behavior, the more violent they become. The fact that psychopathy and ASPD was positively linked with violence was again expected. It was established during the literature review that offenders who used violence were callous (Hemphill et al., 1998). It means that the current study further supports the idea that psychopathy and ASPD are motivated by callousness to engage in violent behavior.

Limitations of the Study and Recommendations for Future Research

The present study's findings were subjected to at least one limitation. Although the intention was to understand the lived experiences of offenders who recidivate, qualitative studies on the topics of personality and recidivism were not located throughout the database. Consequently, the current study only synthesized quantitative studies. Therefore, future research could investigate the lived experiences of offenders with ASPD and Dark Tetrad personalities who tend to recidivate.

Conclusion

The present study examined the relationship between Dark Tetrad personalities, ASPD, recidivism, and violent crimes. Findings from the literature review revealed that traits of ASPD and Dark tetrad personality, specifically, psychopathy are related to both recidivism and violent crime. The findings of the present study implied that offenders with traits of ASPD and psychopathy were less likely to benefit from treatment programs such as psychotherapy. The study extended knowledge on the maladaptive traits of ASPD and psychopathy which were found to contribute to recidivism and violent crime. The aim was to disseminate the findings to the criminal justice system to help understand offenders who persist in their antisocial behavior and reoffend. The results of the current study are presented in the format of thesis and will be uploaded on the University of Pretoria's library website. Several academic articles may stem from the current study.

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**APPENDIX A:
PRISMA FLOW DIAGRAM**

