

**'DARK TRIAD' PERSONALITY TRAITS AND RISKY SEXUAL BEHAVIOUR**

**BY**

**LESLEY TAKALANI MAUDA**

**MASTER OF ARTS IN CLINICAL PSYCHOLOGY**

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(TURFLOOP CAMPUS)**

**SUPERVISOR: DR S. MASHEGOANE**

**CO-SUPERVISOR: DR S. MORIPE**

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## **Declaration**

I, Lesley Takalani Mauda, declare that the mini-dissertation hereby submitted to the University of Limpopo, as partial fulfilment of the Master of Arts degree in Clinical Psychology, has not previously been submitted for a degree at any other university, that, it is my own work in design and execution, and all the materials contained therein have been duly acknowledged.

Signature.....

Date.....

## DEDICATION

This mini-dissertation is dedicated to my late parents, Joseph Ratshibvumo Mauda and Violet Virginia Sithole. I do not have any doubt that this has put smiles on your faces. *Rest in peace Muzhambi and Nkundlande!*

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## Abbreviations

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CDC	Centres for Disease Control and Prevention
DSM-IV-TR	Diagnostic and Statistical Manual of mental disorders, fourth edition, and text revised
HSRPS	Hare's Self Report Psychopathy Scale
LSRPS	Levenson's Self-Report Psychopathy Scale
MACH-IV	Machiavellian Scale Fourth Version
NPI-40	Narcissistic Personality Inventory
PCL-R	Psychopathy Check List Revised
SOI-R	Revised Sociosexuality Inventory
SPSS	Statistical Package for the Social Sciences
WHO	World Health Organization

## ABSTRACT

This study investigated the relationship between the 'dark triad' personality traits and risky sexual behaviour (sociosexuality), and the effect of gender on the relationship. Participants consisted of two hundred and twenty-two (222) University of Limpopo students. Correlation analysis results indicate that, among males, primary psychopathy is positively associated with overall sociosexuality and secondary psychopathy is negatively associated with the behavioural component of sociosexuality. Primary, secondary and overall psychopathy was positively related to risky sexual behaviour (sociosexuality). However, Machiavellianism, narcissism and overall psychopathy were not related to all dimensions of sociosexuality. Regression analysis results revealed that very few 'dark triad' personality traits have the capacity to predict risky sexual behaviour (sociosexuality). High risk socio-sexual behavioural features were predicted by the 'dark triad' personality traits mostly among females than among males. There were comparatively more factors associated with risky sexual behaviour among females than males in this sample. Generally, the 'dark triad' personality traits varied in relating with features of risky sexual behaviour. The nature of the relationship of 'dark triad' personality traits depends on the particular type of risky sexual behaviour. This is contrary to previous empirical findings that suggest that, when measured in a normal sample, correlates of the 'dark triad' personality traits will be the same. Recommendations were made on the basis of the results.

Key words: 'dark triad', narcissism, psychopathy, Machiavellianism, sociosexuality.

# CHAPTER 1

## INTRODUCTION AND BACKGROUND

### 1.1 Introduction

The 'dark triad' personality traits, consisting of psychopathy, Machiavellianism and subclinical narcissism, share substantial features although they are of different origins. All members of the 'dark triad' personality traits have been previously studied in clinical samples as well as in non-clinical samples. 'Dark triad' personality traits are theoretically and empirically perceived as abnormal or pathological in nature (Williams & Paulhus, 2002), and possess tendencies that are likely to be considered as undesirable in interactional situations. As such, individuals with these personality traits might obviously be predisposed to engage in risky behaviours. This study specifically looks into how members of the 'dark triad' personality traits are identical or vary in relation to engaging in risky sexual behaviour (conceptualized in this study as sociosexuality).

Personality traits that make up the 'dark triad' have features that render them unattractive to others. Hare (1996) described psychopathy as a socially devastating disorder characterized by impulsivity, low affect, irresponsibility, sensation seeking, manipulation and poor social relations. Christie and Geis (1970) described Machiavellianism as a manipulative personality. Subclinical narcissism, on the other hand, has been described as the attention seeking personality, characterized by feelings of dominance, grandiosity and superiority (Raskin & Hall, 1979).

Recently, there has been a growing interest in understanding the personality traits of the 'dark triad' in relation to various behaviours. It has also been established by previous researchers, such as Paulhus, Williams and Harms (2001), that the 'dark triad' personality traits are largely different though they share certain characteristics. Such research findings are presented to confirm the assertion that, in non-clinical samples, members of the 'dark triad' personality traits share similar characteristics (McHoskey, 2001). Personality

traits belonging to the so-called 'dark triad' have been found to share common characteristics such as disagreeableness, promiscuous sexuality, preferring anti-social entertainment and a desire for delinquent behaviour (Paulhus et al., 2001). The association between the 'dark triad' personality traits and behaviours such as mating strategies (Jonason, Li, Webster & Schmitt, 2009), self-control (Jonason & Trost, 2010), mate retention and mate poaching (Jonason, Li & Buss, 2010) and short-term mating (Jones & Paulhus, 2010) has been found to be positive. However, to date, no studies have, as far as I am aware, investigated the sexuality of people with 'dark triad' personality traits in South Africa.

The focus of numerous previous studies has been mainly on how 'dark triad' personality traits share similar characteristics. Such past studies were limited to behaviours such as self enhancement and verbal/non-verbal IQ discrepancy in differentiating members of the 'dark triad' personality traits (Williams & Paulhus, 2002). However, unique features of each personality trait were also noted. For instance, other previous studies have established that narcissism is linked to low relationship commitment and less restricted forms of sociosexuality (Campbell, Foster & Finkel, 2002; Foster, Shrira, & Campbell, 2006). The similarities and differences of the 'dark triad' personality traits in terms of risky sexual behaviour need to be explored further, particularly in Africa. It is therefore against this background that the present researcher sought to ascertain how university students with 'dark triad' personality traits (Machiavellianism, psychopathy and subclinical narcissism) would score on a sociosexuality measure, and whether gender would influence such scores.

Apart from examining the similarities and differences that exist amongst the members of 'dark triad' personality traits, the researcher investigated whether sex differences on sexuality measures observed in previous studies (e.g., Paulhus & Williams, 2002) as this is also evident in this study. Gender is an important variable to be studied as well in the 'dark triad' personality studies. Previous researchers, such as Buss and Schmitt (1993), argue that gender

has a positive effect on the scores of 'dark triad' personality traits in relation to risky sexual behaviour (conceptualized as sociosexuality).

## 1.2 **Statement of the Problem**

The issue of whether the 'dark triad' of personality consists of traits that are related but conceptually distinctive (Jones & Paulhus, 2011a, b; Paulhus & Williams, 2002), or overlapping and similar (Jonason et al., 2009), is under debate. This study sought to contribute to this line of research by investigating the relationship between the 'dark triad' personality traits and risky sexual behaviour (sociosexuality). A common response pattern to the sociosexuality correlates would suggest a possible similarity of personality styles between the 'dark triad' personality traits, while variation in response to sociosexuality measures would mean that the personality traits are distinct.

## 1.3 **Background to the Study**

The need to investigate the differences and similarities that exist amongst the members of the 'dark triad' personality traits, especially in normal populations, is motivated by the lack of an effective explanation of these personality constructs in terms of their socio-sexual styles. Those who have studied the 'dark triad' personality traits (e.g., Buss & Schmitt, 1993) used clinical samples and most of their studies were conducted in Western countries. To explore whether people with 'dark triad' personality traits would behave the same or differently sexually, since they share similar characteristics such as manipulativeness, has not been previously investigated in South Africa.

According to the WHO (1998), it is generally assumed that personality development and risky sexual behaviours peak in young adulthood. However, little is known about the relationship between the two. Although there might be a link between 'dark triad' personality traits and risky sexual behaviour (conceptualized as sociosexuality), not much has been investigated in terms of how such a link is determined by the gender of the participant. The current researcher hypothesized that the results of this study would confirm pervasive

sex differences (e.g., Buss & Schmitt; Jonason et al.) previously found between attitudes of men and women with 'dark triad' personality traits with regard to risky sexual behaviour (sociosexuality)

#### **1.4 Aim of the study**

The aim of the study was to investigate the relationship between 'dark triad' personality traits and risky sexual behaviour as measured by sociosexuality, and the effect of gender on the relationship.

#### **1.5 Objectives of the study**

1.5.1 To investigate if males and females will obtain different scores on measures of the 'dark triad' personality traits and risky sexual behaviour, conceptualized as sociosexuality in this study.

1.5.2 To examine whether the 'dark triad' personality traits predispose individuals differently towards risky sexual behaviour, measured as sociosexuality.

1.5.3 To investigate if there is any gender effect on the relationship between 'dark triad' personality traits and risky sexual behaviour, or sociosexuality.

#### **1.6 Hypotheses**

1.6.1 Scores of males and females will differ for each of the major variables of the study (namely, 'dark triad' personality traits and risky sexual behaviour [sociosexuality]).

1.6.2 Each of the 'dark triad' personality traits will be positively associated with risky sexual behaviour (sociosexuality).

1.6.3 'Dark triad' personality traits are expected to predict risky sexual behaviour (sociosexuality).

## 1.7 **Need for the study**

'Dark triad' personality traits are some of the personality variables in need of empirical attention. A number of studies have also supported the contention that, when measured in normal populations, the 'dark triad' personality traits vary though they overlap in their variations (Williams & Paulhus, 2002). Despite such findings, both 'dark triad' personality traits and risky sexual behaviour remain debatable issues worthy of study. Many researchers have also sought to explain why individuals classifiable along any of the 'dark triad' personality traits find it difficult to remain faithful in long-term marital relationships (e.g., Schmitt, 2004).

It has been found that men with 'dark triad' personality traits tend to have more sexual partners and higher numbers of short-term relationships than females (Jonason et al., 2009). The current study is noteworthy since it explains the similarities and differences that exist amongst members of the 'dark triad' in terms of risky sexual behaviour (conceptualized as sociosexuality), as well as gender differences. On the other hand, studying risky sexual behaviours and personality helps in exposing and identifying personality traits associated with marital infidelity and those involving in promiscuous sex with multiple partners.

## 1.8 **Significance of the study**

A few studies have explained the nature of the 'dark triad' personality traits in relation to risky sexual behaviour (sociosexuality) in subclinical populations (e.g., Foster, Shrira & Campbell, 2006; Jonason et al., 2009; Jones, 2010). With an understanding of the personality traits of those more apt to ignore the sexual risks, the researcher hopes the findings of this study to be eventually used to establish effective intervention and prevention programmes to help sexual risk-takers better understand the consequences of their behaviour and increase their control. Furthermore, by assessing the relationship between 'dark triad' personality traits and risky sexual behaviour (sociosexuality), this research provides knowledge about the relationship of personality traits and



risky sexual behaviour. Such knowledge can be used to identify populations at risk. The study of 'dark triad' personality traits and risky sexual behaviour has received inadequate attention in South Africa. It is also in this context that the present study was conducted.

## 1.9 Operational definition of terms

### 1.9.1 'Dark triad'

According to Williams and Paulhus (2002), the 'dark triad' has been described as a set of three personality traits, consisting of Machiavellianism, subclinical narcissism and subclinical psychopathy. Individuals who possess any one of the traits of the 'dark triad' are likely to be selfish, to possess a grandiose sense of importance and feel an increased sense of entitlement. Further, the individuals are often pre-occupied with expressions of dominance and power. Because of this, individuals with 'dark triad' personality traits are possibly over-represented in samples of offender and maladjusted individuals (e.g., prisons and mental health institutions).

### 1.9.2 Machiavellianism

Christie and Geis (1970) have defined Machiavellianism as a manipulative personality, one which believes that the end justifies the means, regardless of the associated human suffering. Individuals with this personality trait are arrogant, calculating and will use whatever means necessary, such as deception and undermining the trust of others, to achieve their goals. While society has deemed individuals with Machiavellianism to be socially manipulative, Machiavellians do not see themselves as being selfish or entitled-minded. They are excellent at rationalizing their behaviour.

### 1.9.3 Narcissism

The DSM-IV-TR (American Psychiatric Association, 2000) defines narcissism as a personality disorder characterized by feelings of dominance, grandiosity

and superiority. The variant described by the DSM-IV-TR is the pathological type. Yet, narcissism can also manifest in subtle ways in everyday behaviour. Thus, there is also the subclinical type of narcissism, which shares most of the characteristics of the pathological type in less extreme form. Individuals with narcissism often experience an increased sense of entitlement, a need to succeed and a craving to be admired. This need to be admired often leads narcissists to seek a high profile in society and take up stressful jobs. Since image is so important to them, they perform exceptionally well in difficult situations. While narcissists perform well in the workplace, they are not team players and are only interested in their own accomplishments. According to Paulhus and Williams (2002), individuals with narcissistic personality traits will use whatever means necessary to get what they desire, including the use of deception and manipulation of others.

#### 1.9.4 Psychopathy

According to the DSM-IV-TR (American Psychiatric Association, 2000), psychopathy is defined as a socially devastating disorder defined by a constellation of affective interpersonal and behavioural characteristics including, egocentricity, impulsivity, irresponsibility, shallow emotions, lack of empathy, guilt or remorse, pathological lying, manipulateness and the persistent violation of social norms and expectations. Hare (1996) describes psychopathy as an informal term without a strict definition and is characterized by thrill seeking, impulsivity, irresponsibility, cold affect and other anti-social behaviours.

#### 1.9.5 Personality

The current diagnostic manual of mental disorders, the DSM-IV-TR (American Psychiatric Association, 2000), defines personality as enduring patterns of perceiving, relating to and thinking about the environment and oneself that are exhibited in a wide range of social and interpersonal contexts.

### 1.9.6 Sociosexuality

Penke and Asendorf (2008) define sociosexuality as being an individual's attitudes and behaviours regarding casual sex. Furthermore, it is considered to be sexual liberalness commonly leading to a short-term exploitative sexual style. The construct of sociosexuality or socio-sexual orientation captures individual differences in the tendency to have casual and uncommitted sexual relationships. The term was introduced to describe the individual differences in sexual permissiveness and promiscuity in sexual behaviour. The present study refers to risky sexual behaviour as sociosexuality.

### 1.10 Conclusion

Chapter one provided a general overview of the study and the definition of concepts to be used have been discussed. The next chapter presents the literature review, previous empirical findings and the theoretical explanation of the 'dark triad' personality traits in other countries. By determining the similarities or differences that exist amongst the 'dark triad' personality traits in relation to their attitudes towards risky sexual behaviour (conceptualized as sociosexuality), research further explains the impact of gender on the differential attitudes towards risky sexual behaviours.

## CHAPTER 2

### THEORETICAL FRAMEWORK AND LITERATURE REVIEW

#### 2.1 Theoretical Framework

Attempts have been made both empirically and theoretically to provide an understanding of the 'dark triad' personality traits. According to the DSM-IV-TR (American Psychiatric Association, 2000), which is largely based on the medical model, personality traits are viewed categorically and occupy an unstable position in psychiatric classification. Paulhus and Williams (2002) view personality disorders as extreme variants of abnormal personality traits. On the contrary, the dimensional model of personality considers personality disorders and personality traits to fall on a continuum. Page and Saulsman (2004) interpret this to mean that abnormal personality constructs are simply exaggerations of normal traits. As such, the main aim of the present study was to investigate if risky sexual behaviour, conceptualized as sociosexuality, varies amongst the 'dark triad' personality traits.

Some of the models that have partly shed light in explaining the 'dark triad' personality traits in the past are: the interpersonal circumplex model, the three-factor model, the four-factor model, the famous "Big five" or five-factor model and the seven-factor model (Cloninger, Pryzbeck & Svrakic, 1993; Costa & McCrae, 1992; Jackson, Livesley & Schroeder, 1992). The more recent approaches regard personality as dimensional. For instance, the dimensional approach to personality disorders views the 'dark triad' personality traits as continuously distributed in populations. It is within this framework that 'dark triad' personality traits are studied. The present study sought to establish if there are similarities or differences between these personality traits on a factor such as risky sexual behaviour (sociosexuality). If the personality traits are similar, it is likely that they will score the same on a measure of risky sexual behaviour (sociosexuality). Due to lack of theoretical explanation of the 'dark triad', the researcher adopts an integrative approach

based on the dimensional and conceptual views as well as empirical findings about the 'dark triad' personality traits.

## **2.2 Dark triad personality traits and risky sexual behaviours (sociosexuality)**

The personality traits that make up the 'dark triad' are, namely: Machiavellianism, narcissism and psychopathy (Paulhus & Williams, 2002). These personality traits are usually associated with negative social behaviours. As such, they are viewed as 'dark' personalities. One of the three personality traits, psychopathy for example, is associated with a lack of neuroticism and anxiety (Taylor & Amor, 1996) which contributes to high rates of remorselessness and impulsivity in this personality trait. Subclinical narcissism, on the one hand, is associated with self-aggrandizement while Machiavellianism is linked with being socially manipulative (Christie & Geis, 1970; Raskin & Hall, 1979). In the current study, the researcher examines the links between 'dark triad' personality traits and their differential or similar attitudes towards risky sexual behaviour (conceptualized as sociosexuality).

According to Paulhus and Williams (2002), the 'dark triad' consists of three conceptually but statistically overlapping personality traits. The personality traits are psychopathy (Hare, 1996), which is characterized by thrill seeking; Machiavellianism, which is manipulative in nature (Christie & Geis, 1970) and lastly, narcissism (Kohut, 1977), which is characterized by grandiosity. Despite having similar characteristics such as callousness and disagreeableness, members of the 'dark triad' personality traits can be differentiated by interpersonal tactics (Jones & Paulhus, 2011b). It has often been suggested that the 'dark triad' personality traits display maladaptive behaviours in interpersonal relations. Empirical support for these suggestions has emerged since the recent development of 'dark triad' measures in non-clinical samples (Paulhus & Williams, 2002). In view of all of the above, differences should be evident in the 'dark triad's' attitudes towards risk-taking behaviour as measured by sociosexuality.

In other studies, researchers have been able to explore the link between promiscuous sexual activity and psychopathy (Paulhus et al., 2001; McHoskey, 2001). These researchers found that psychopathy is positively linked to promiscuous sexual activity. In addition, associations between promiscuous sexuality and narcissism were also reported by McHoskey (2001). Furthermore, Williams (2002) found that there were links between promiscuous sexuality and Machiavellianism. In light of such associations, it might be that in non-clinical samples, the 'dark triad' personality traits may be identical and share a similar pattern of engaging in risky sexual behaviour (sociosexuality) and that psychopathy will emerge as the personality trait that engages more in risky sexual behaviours (sociosexuality) than the other two in both genders.

A number of studies have indicated that the 'dark triad' personality traits mostly prefer short-term mating styles and show less interest in long-term lasting romantic relationships (Jones & Paulhus, 2010; Lee & Ashton, 2005; Paulhus & Williams, 2002). Other studies have also found that those possessing a high degree of 'dark triad' personality traits exploit others in short-term social contexts (Bradlee & Emmons, 1992; Foster, Shrira & Campbell, 2006). This might be as a result of sharing common characteristics such as low empathy, disagreeableness and callousness. Therefore, negative associations with long-term romantic relationship interest and unrestricted socio-sexual styles are predicted for each of the 'dark triad' personality traits in this study.

Although findings of a study conducted by Williams (2002) illustrated that narcissists, Machiavellians and psychopaths all have high levels of sexual interest, he suggested that such correlations be interpreted differently for each personality type in order to clearly rule out any possible influences that may derive from a common element among the 'dark triad' personality traits. In previous studies, researchers compressed the 'dark triad' personality traits into a single measure when they were interpreting their results, something which might have obscured the variations amongst the three personality traits.

Researchers have managed to explore associations amongst the members of 'dark triad' personality traits in both clinical and non-clinical settings (Paulhus et

al., 2001; Lee & Ashton, 2005; Paulhus & Williams, 2002). These researchers have repeatedly shown that the three personality traits are differentially associated, yet also overlap to a considerable extent. As a result, their findings have added to existing empirical evidence for the overlap of all 'dark triad' members with each other. For instance, 'dark triad' personality traits differed in domains such as self-enhancement and verbal and non-verbal IQ (Paulhus & Williams, 2002). The present study hypothesizes that 'dark triad' personality traits will vary systematically in how they engage in risky sexual behaviour (sociosexuality) and that their scores would be influenced by gender.

Other findings confirm that psychopaths are the only members of the 'dark triad' personality traits which are exclusively short-term in their mating strategies. For example, these studies found that neither Machiavellians nor narcissists showed an overall preference for long-term mating and that psychopaths were the only members of 'dark triad' personality traits which are highly associated with high socio-sexual styles (Jones & Paulhus, 2010; Schmitt, 2009). Schmitt (2009) recently found results which confirm that psychopathic personality traits have a more positive effect than both narcissistic and Machiavellian personality traits in predicting preferences of risky socio-sexual styles. Other studies also pointed out to high rates of casual sex among all of the 'dark triad' members (e.g., Paulhus et al., 2001; Jonason et al., 2009). Therefore, the issue of sexuality among 'dark triad' personality traits is still open to debate.

In addition, Jonason and Webster (2010) found that scores of 'dark triad' personality traits were related to having more sex partners, an unrestricted sociosexuality and a greater preference for short-term mates. Jonason and Webster (2010) have also found, based on exploratory and confirmatory factor analyses that, the three measures of 'dark triad' personality traits can be compressed into a single construct. Campbell et al. (2002) and Jonason et al. (2009) also found that scoring high on a 'dark triad' personality measure especially for a man, is associated with being sociosexually unrestricted, having more sex partners and a low interest in long-term sexual relationships.

According to Williams (2002), when the 'dark triad' personality traits are measured in non-institutionalized populations, they appear to be distinct entities. In contrast, McHoskey (1995) argues that narcissism, Machiavellianism and psychopathy are one and the same construct, especially in non-clinical populations. Apart from such findings, associations of the 'dark triad' personality traits have been reported in empirical studies to be high. In spite of all these findings, it is not clear if 'dark triad' personality traits will differ in terms of their attitudes and behaviours towards risky sexual behaviour (sociosexuality).

The present study investigated the associations between the characteristics of 'dark triad' personality traits and their approaches to risky sexual behaviour (sociosexuality). Since these personality traits overlapped in callousness and disagreeableness in previous studies (e.g., Paulhus & Williams, 2002), it is likely that 'dark triad' personality traits will share a similar unrestricted approach to risky sexual behaviour (sociosexuality). Finally, the study also determines whether the gender differences in scores previously observed (e.g., Paulhus & Williams, 2002) will be evident amongst university students in this study.

### **2.3 Mating strategies of 'dark triad' personality traits**

Many previous studies assert that those scoring high on any of the 'dark triad' personality traits are well suited for an exploitative and a short-term mating approach in a mating context. Such studies also reported that all three 'dark triad' personality traits correlated with low agreeableness and marital dissatisfaction (cf. Jonason & Kavanagh, 2010; Jonason et al., 2009). Foster et al. (2006) and Campbell et al. (2002) found that narcissists have a tendency to have an unrestricted sociosexuality and a higher level of infidelity. In the present study, one of the researcher's predictions is that the three 'dark' triad personality traits will be positively related with all the features of risky sexual behaviour (sociosexuality). The findings of Jonason et al. (2009) indicated that those who scored high on the 'dark triad' personality traits were associated with more sexual partners and were less restricted in mating styles. Jonason et al.



also revealed that individuals scoring high on the 'dark triad' personality traits are likely to leave mating relationships to begin relations with new mates.

Previous researchers, such as McHoskey (2001), had a smaller amount of men than women in their samples. This may have had an undue influence on the sex differences they found. Although their results were consistent with the possibility that the 'dark triad' personality traits facilitate an exploitative and a short-term mating style in men, the present study predicts that men and women will differ in their attitudes of risky sexual behaviour (conceptualized as sociosexuality).

#### **2.4 The influence of gender on the relationship between the 'dark triad' personality traits and risky sexual behaviour (sociosexuality)**

In numerous previous studies, gender played a significant role in determining the level of sexual risk that members of the 'dark triad' personality traits are exposed to. However, such differences are well documented in Western studies. It is not known whether research conducted in an African context will follow suit. Apart from the nature of 'dark triad' personality traits measures, cultural beliefs and convictions about gender roles might influence a participant's scores.

Jonason and Webster (2010) and Jonason et al. (2009) identified gender differences in a variety of the 'dark triad's' sexual behaviours in non-clinical samples. In these studies, men scored significantly higher than women, particularly in psychopathic personality traits. With regard to gender differences and sexual activities, researchers such as Buss and Schmitt (1993) and Jonason et al. (2009) analysed results of men and women separately in their studies. Men scored higher than women in both 'dark triad' measures and sociosexuality measures (Schmitt, 1995). In line with these past findings, the present study predicts that gender will have an impact on the scores of the participants' 'dark triad' personality scores.

Schmitt (1995) found that men are more sociosexually unrestricted than women in his study. Schmitt's (1995) results are supported by Jones and Paulhus' (2010) findings. In their study, men scored higher on the 'dark triad' personality measures than females on all three of the 'dark triad' personality traits, with psychopathy showing the largest contribution. Jones and Paulhus also found that the unique components of Machiavellianism and narcissism were unrelated to long-term romantic relationships and mate-poaching for both males and females. In a similar study by Jonason et al. (2010), men scored significantly higher on 'dark triad' personality traits than women. Based on the conceptual similarities of Machiavellianism and psychopathy (McHoskey, Worzel & Szyarto, 1998), it is expected that high scores on both scales of Machiavellianism and psychopathy will be positively associated with risky sexual behaviour (sociosexuality). As already suggested, Machiavellianism is associated with promiscuous and coercive sexual behaviour (McHoskey, 2001).

Past research on psychopathy with clinical samples has focused almost exclusively on men since they dominate such samples (e.g., Lykken, 1995). This study investigates gender differences on the scores of males and females on the 'dark triad' personality measures, as well as on their scores on risky sexual behavioural (sociosexuality) features.

## **2.5 The similarities of the 'dark triad' personality traits**

The 'dark triad' framework championed by Paulhus and Williams (2002) highlights associations between subclinical psychopathy, Machiavellianism and narcissism. According to Paulhus and Williams (2002), the 'dark triad' refers to three theoretically distinct but empirically overlapping personality traits. The term reflects the view that the three diagnostic categories have at least similar underlying factors. Again, the 'dark triad' composite is associated with "short-term mating above and beyond effects of participants' age, sex and extraversion" (Jonason et al., 2009, p 13).

Paulhus and Williams (2002) describe psychopathy as a subclinical category characterized by high impulsivity, callousness, interpersonal manipulation, exploitation and stimulation seeking, low empathy, anxiety and lack of remorse. Williams and Paulhus (2002) view individuals higher in psychopathy as antisocial, displaying negative behaviours towards others, and are also seen as lacking psychological maturity or ego development. In other words, those possessing a higher degree of psychopathic traits, display impaired social behaviour. On the other hand, Kohut's (1977) self-psychology considers narcissism to be associated with protection of a weak and damaged self. Clinically, the narcissistic personality is characterized by a grandiose self-view, a sense of entitlement, lack of empathy and egotism. Christie and Geis (1970) describe Machiavellianism to be characterized by the manipulation and exploitation of others, scoring low in humility (Lee & Ashton, 2005) and maximizing self-interest by deceiving and disregarding others.

Jones and Paulhus (2011b) point out that as a group, members of the 'dark triad' personality traits involve characters with negative interpersonal relations. McHoskey et al. (1998) conducted a study to examine the relationship between Machiavellianism and psychopathy. They found that Machiavellianism and psychopathy share characteristics such as dominance and low affect. Based on their findings, they argue that such common characteristics make it difficult to distinguish the two personality traits. Guided by this literature, the present study hypothesizes that Machiavellianism and psychopathy will predict risky sexual behaviour (conceptualized as sociosexuality) in both males and females. Little is understood about the origin of 'dark triad' personality traits. In this section the origin of the 'dark triad' personality traits was explained according to the dimensional and conceptual views as well as empirical findings. However, the question still remains as to how the 'dark triad' personality traits are the same or are different towards risky sexual behaviour (conceptualized as sociosexuality).

The literature review has paid a special attention to the similarities and differences that exist amongst the members of the 'dark triad' personality traits, the influence of gender, factors that are related to the conceptual and

theoretical views of the 'dark triad' personality traits. In addition, the differences of the 'dark triad' personality traits in non-clinical samples as well as in clinical samples have been explored as well. Although, there are few studies investigating the 'dark triad' in South Africa, previous empirical findings have indicated that there are gender differences in the scores of people with 'dark triad' personality traits. It is in line with the above studies that this research is needed to attempt to explain the 'dark triad' personality traits in relation to risky sexual behaviour (conceptualized as sociosexuality).

The next chapter presents the methodology that was employed to investigate the similarities and differences that exist amongst the members of the 'dark triad' personality traits and their differential attitudes towards risky sexual behaviour (sociosexuality) in a non-clinical sample.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter outlines the research methodology used in the present study. It outlines the research design used, research procedure followed, methods used in data collection, and the way in which the data were analysed.

#### 3.2 Research Design

A cross-sectional research design was used in this study. In a cross-sectional study, data are collected at one point only.

#### 3.3 Sampling

The sample of the study was drawn from the student population of a historically Black university in Limpopo, South Africa. Participants were recruited using a convenience sampling procedure. This means that they were selected based on accessibility and availability. In total, 222 students were selected. All the participants were of African descent. Eventually, only 207 single participants were considered for analysis, while 15 of them were excluded since they were married (7), divorced (7) or widowed (1), experiences which may affect outcomes differently.

Participants had to complete a questionnaire which had five sections. Section A of the questionnaire was the Levenson's Self-Report Psychopathy Scale (LSRPS) for assessing antisocial personality traits. Section B was the Narcissistic Personality Inventory (NPI-40 scale) for assessing subclinical narcissistic personality traits, and Section C was the Machiavellian scale fourth version (MACH-IV) for assessing Machiavellianistic personality traits. Section D was the Revised Sociosexuality Inventory (SOI-R) which was used to assess risky sexual behaviours of the 'dark triad' personality traits. The

participants were requested to write their demographic information on Section E of the questionnaire.

### **3.4 Research Variables**

The independent variables in the present study were 'dark triad' personality traits and gender, while the dependent variable was risky sexual behaviour, which was conceptualized and measured as sociosexuality.

### **3.5 Data collection procedures**

The proposal of the study was approved by the University of Limpopo's Ethics Committee. Participants who did not wish to participate were allowed to withdraw from the study. Anonymity and confidentiality were assured to participants as it was explained that the results of the study were going to be used for research purposes only. Participants were not identified on the questionnaires for the sake of confidentiality. They were not expected to write their names in any of the questionnaire pages and it was explained that information they provided would be published, however, readers would not be able to identify who provided the information since their names would not be included on the questionnaire. The verbal explanations and consent were also supplemented by the written form (see the appendix for the cover letter).

Data was collected at different times and venues, but mostly during weekdays. At times, data was also collected in lecture halls from participants who were willing to participate. The study was first explained to them, and then they were requested to volunteer. Participants were aware that they could terminate participation at any stage of the data gathering process. Participants gave both verbal and written consent (see appendix for an aspect of the written consent). They were given a questionnaire which they would return at a later stage. However, they were not required to enlist their names or cite it anywhere on the questionnaire itself. A larger number of students who were approached to participate in the study were returning University of Limpopo students who were found on queues for registration renewal.

## 3.6 INSTRUMENTS

### 3.6.1 Demographic Information of participants

Demographic data collected included the following: age, sex, socio-economic status, educational level, ethnic group, marital status, religion and geographical location.

### 3.6.2 Levenson's Self-Report Psychopathy Scale (LSRPS, Levenson, Kiehl & Fitzpatric, 1995)

The LSRPS (Levenson, Kiehl & Fitzpatric, et al., 1995) was used in this study to measure psychopathic traits. It is a 26-item self-report measure, which mirrors the contents of Hare's Psychopathy Checklist-Revised (PCL-R, Hare, 1991). The items were responded to on a 4-point scale ranging from "disagree strongly" (equals 1) to "agree strongly" (equals 4). The scale includes reverse scored items to control for response set. The total scores range from 26 to 104. However, the LSRP is normally scored for both primary and secondary psychopathy. The scale for primary psychopathy has 16 items and is designed to assess the interpersonal and affective features of psychopathy (i.e., selfish and manipulative attitude towards others). The primary psychopathy subscale scores range from 16 to 64. An example of an item from this subscale is "For me, what's right is what I can get away with." The secondary scale includes 10 items and is designed to assess impulsivity and other antisocial behaviours (Levenson et al., 1995). The secondary subscale scores range from 10 to 40. An example of an item from this subscale is, "I find myself in the same kinds of trouble, time after time."

Levenson et al. (1995) found that the primary and secondary scales were positively correlated with each other ( $r = 0.40$ ). They also found Cronbach's alpha for the total LSRP, primary psychopathy and secondary psychopathy scales to equal as = 0.82, as = 0.83, and as = 0.71, respectively. In this study the reliability coefficients were  $\alpha = 0.604$  for primary psychopathy,  $\alpha = 0.555$  for secondary psychopathy and  $\alpha = 0.673$  for the total LSRP scale.

### 3.6.3 Machiavellianism Scale (MACH-IV; Christie & Geis, 1970)

The MACH-IV is made up of 20 items, 10 indicating high Machiavellianism and 10 indicating the opposite (low Machiavellianism) (Christie & Geis, 1970). The items reflect ways of thinking and opinions about people and things. The MACH-IV scale consists of 20 items on a response scale of 1 (*strongly disagree*) to 5 (*strongly agree*) and cover three areas: (1) nine items concerning opinions about human nature, i.e., “most people are basically good and kind”; (2) nine items describing duplicity tactics, i.e., “It is wise to flatter important people”; and (3) two items concerning themes of abstract morality, i.e., “All in all, it is better to be humble and honest than important and dishonest”. The MACH-IV scale is an interesting method for assessing awareness and social functioning in a social context often characterized by interpersonal deception (“Machiavellianism”). These features depend on an accurate interpretation of even the most particular intention of respondents. Values of coefficient alpha from previously published studies for example, Wrightsman (1991) found  $\alpha$ s = 0.55 and 0.63 for men, and for women  $\alpha$ s = 0.47 and  $\alpha$ s = 0.51, respectively.

### 3.6.4 Narcissistic Personality Inventory (NPI-40; Raskin & Hall, 1979)

Narcissism was assessed using the NPI-40 (Raskin & Hall, 1979), where participants choose one of two statements which they feel applies to them the most. One of the two statements reflects a narcissistic attitude or way of orienting to the world, whereas the other statement does not (1= narcissistic response, 0= non-narcissistic response). The final score consists of the number of narcissistic selections endorsed. Although Raskin and Terry (1988) found seven factors in their factor analysis of the scale, it is also possible to use a total score of the scale. In the total scale the scores can range from 0-40, with higher scores indicating greater degrees of narcissism. In this study the reliability coefficient obtained for the total scale was ( $\alpha = 0.695$ ).



### 3.6.5 Revised Socio-Sexual Orientation Inventory (SOI-R, Penke & Asendorpf, 2008)

The SOI-R is a 9 item self-report measure. It includes three subscales corresponding to the desire, behaviour and attitudes facets of socio-sexual orientation. The desire subscale ( $\alpha = 0.88$ ) reflects an individual's interest in uncommitted sex (e.g., "How often do you experience sexual arousal when you are in contact with someone you do not have a committed relationship with?"), the behaviour subscale ( $\alpha = 0.86$ ) reflects an individual's past uncommitted sexual activity (e.g., "With how many different partners have you had sexual intercourse on one and only one occasion?"), the sociosexuality attitudes' subscale ( $\alpha = 0.89$ ) reflects an individual's beliefs about uncommitted sexual activity (e.g., "I can imagine myself being comfortable and enjoying casual sex with different partners"). A global socio-sexual orientation score (SOI-R Total score,  $\alpha = 0.88$ ) can also be obtained by computing the means of all nine items. Participants are asked to respond to each item using a 9 point Likert scale (ranging from 1-9), with higher numbers indicating a more unrestricted socio-sexual orientation. In the present study, the SOI-R was mainly used to detect risky sexual behaviour. Penke and Asendorpf (2008) established that when using confirmatory factor analysis, the items of the SOI-R represent different facets of risky sexual behaviour (sociosexuality).

## 3.7 Conclusion

This chapter discussed the methodology which was employed in the present study and also discussed the nature and properties of the measures to be used for data collection. The next chapter presents the results of the study.

## **CHAPTER 4**

### **RESULTS**

#### **4.1 Introduction**

This chapter presents the results of the study. Analysis was conducted using the statistical software called SPSS Version 18 (SPSS Inc, 2009). The reliability levels of the instruments used were tested. In order to describe the data, a preliminary exploratory analysis was conducted. In the first section of the results the demographic information of participants is presented (Table 1). Further, in this section the mean scores of males and females on the 'dark triad' personality traits and SOI-R scales are compared using T-test analysis (See Table 2). Section 4.3 presents the comparison of male and female participants' 'dark triad' personality traits scores and risky sexual behaviour (sociosexuality).

The main analysis involved the use of regression analysis to evaluate if sociosexuality features can be determined by scores of the 'dark triad' personality traits (See Table 4). First, correlations between 'dark triad' scales and sociosexuality features for male participants are presented in Table 3a, while those for female participants follow in Table 3b. The results of linear regression follow in section Table 4. Each scale of the 'dark triad' is regressed on risky sexual behaviour features (sociosexuality). However, the desire dimension was excluded from analysis because it failed to correlate with any of the 'dark triad' personality traits.

#### **4.2 Description of the sample**

The first step in the analysis was to describe the participants of the study. Table 1 below provides information about the sample, based on total of (207) participating students. Most participants (48.8%) were between the ages of 20 and 25 years of age and the majority of them were female (54.6%) and came from rural areas (68.1%). Regarding religious affiliation, most participants (48.3%) were born-again Christians.

**Table 1:**  
**Demographic information (N = 207)**

		Frequency	(%)
1. Age	18-20 yrs.	88	(42.5)
	20-25 yrs.	101	(48.8)
	25-30 yrs.	18	(8.7)
2. Gender	Male	94	(45.4)
	Female	113	(54.6)
3. Marital Status	Single	207	(100)
	Married	7	n/a
	Divorced	7	n/a
	Widowed	1	n/a
4. Domicile	Village/Rural area	141	(68.1)
	Township/Suburb	66	(31.9)
5. Religion	Born Again	100	(48.3)
	ZCC	15	(7.2)
	Catholic	52	(25.1)
	Muslim	9	(4.3)
	African Traditional		
	Faith	2	(1.0)
	Other	29	(14.0)

**Note:** Only students who were single were used for the analyses, except for the marital status variable. The marital status variable also shows the values for married, divorced and widowed students, although these are not included in the final analysis.

#### **4.3 Comparison of male and female participants' 'dark triad' personality traits scores and risky sexual behaviour (sociosexuality) measures**

The next analysis involved the comparison of males and females on all the major scales used in the study. The results of ANOVA showed that male and female participants did not achieve different scores on most of the scales. Note that out of 7 comparisons only three were below the required significance level ( $p < 0.05$ ; table 3a). On the psychopathy scales, they differed on primary psychopathy, but scored the same on the remaining two scales (the significance level of the differences on the total psychopathy scale was marginal at  $p < 0.10$ ). The same applied to measures of sociosexuality. The scores of the two sexes differed on the behaviour and attitudes subscales only ( $ps < 0.05$ ).

**Table 2:****Gender differences on 'dark triad' personality traits and risky sexual behaviour (sociosexuality) (N = 207)**

	<b>Gender</b>	$\bar{X}$	<b>(SD)</b>	<b>F</b>	<b>df</b>	<b>p</b>
Primary psychopathy	Males <sup>1</sup>	37.362	(6.120)	9.426	1, 205	0.002
	Females <sup>2</sup>	34.655	(6.474)			
	Both <sup>3</sup>	35.884	(6.444)			
Secondary psychopathy	Males <sup>1</sup>	21.750	(4.029)	0.591	1, 205	(ns)
	Females <sup>2</sup>	22.248	(5.170)			
	Both <sup>3</sup>	22.019	(4.683)			
Psychopathy	Males <sup>1</sup>	59.106	(8.473)	3.062	1, 205	0.082
	Females <sup>2</sup>	56.903	(9.451)			
	Both <sup>3</sup>	57.903	(9.066)			
MACH-IV	Males <sup>1</sup>	58.745	(5.164)	0.343	1, 205	(ns)
	Females <sup>2</sup>	59.159	(4.994)			
	Both <sup>3</sup>	58.971	(5.064)			
NPI-40	Males <sup>1</sup>	18.277	(5.208)	2.232	1, 205	(ns)
	Females <sup>2</sup>	17.221	(4.935)			
	Both <sup>3</sup>	17.701	(5.076)			
Behaviour	Males <sup>1</sup>	8.936	(3.127)	4.124	1, 205	0.044

	<b>Gender</b>	$\bar{X}$	<b>(SD)</b>	<b>F</b>	<b>df</b>	<b>p</b>
Attitude	Females <sup>2</sup>	8.053	(3.105)	9.470	1, 205	0.002
	Both <sup>3</sup>	8.454	(3.139)			
	Males <sup>1</sup>	12.809	(5.943)			
Desire	Females <sup>2</sup>	10.230	(6.050)	0.624	1, 205	(ns)
	Both <sup>3</sup>	11.401	(6.124)			
	Males <sup>1</sup>	8.979	(4.166)			
Sociosexuality	Females <sup>2</sup>	8.549	(3.667)	12.637	1, 205	(ns)
	Both <sup>3</sup>	8.744	(3.898)			
	Males <sup>1</sup>	30.723	(7.970)			
	Females <sup>2</sup>	26.832	(7.734)			
	Both <sup>3</sup>	28.599	(8.060)			

Note: <sup>1</sup>males = 94, <sup>2</sup>females = 113, <sup>3</sup>both genders = 207

#### **4.4 Preliminary results of correlation between ‘dark triad’ personality traits and risky sexual behaviour (sociosexuality)**

Under normal circumstances, having more definitive comparative results on gender serves as an indication that it is not necessary to conduct further analysis separating males and females. In this study the researcher decided otherwise. Further analysis was conducted separately for males and females because previous findings generally suggested that males and females would score differently on the ‘dark triad’ personality traits (e.g., Paulhus & Williams, 2002). For instance, men obtained higher psychopathy scores than women in studies conducted by Jonason and colleagues (Jonason et al., 2010a, b, 2009).

#### **4.5 The correlation of ‘dark triad’ personality traits and risky sexual - behaviour (sociosexuality)**

The next analysis involved correlating measures of the ‘dark triad’ personality traits to risky sexual behaviour (conceptualized as sociosexuality). Analysis was conducted first for males (see Table 3a below). There were only two statistically significant associations, and both were positive. Primary psychopathy was significantly associated with overall risky sexual behaviour (total sociosexuality) ( $p < 0.05$ ), and secondary psychopathy was significantly associated with the behaviour component of risky sexual behaviour or sociosexuality ( $p < 0.05$ ). Thereafter, correlation analysis was conducted for female participants (see table 3b below). Primary psychopathy was positively related to risky sexual behaviour or sociosexuality ( $p < 0.05$ ); secondary psychopathy was positively related to both overall risky sexual behaviour (total sociosexuality) ( $p < 0.05$ ), and its behaviour component ( $p < 0.05$ ), and negatively associated to the attitudes component ( $p < 0.05$ ). Machiavellianism was positively related to the behaviour component and narcissism was negatively associated with the attitude component of sociosexuality.

**Table 3(a):**

**Correlations of 'dark triad' personality traits and risky sexual behaviour (sociosexuality)—male participants (n=94)**

			<i>Primary</i>	<i>Secondary</i>			
			<i>Psychopathy</i>	<i>Psychopathy</i>	<i>Psychopathy</i>	<i>MACH-IV</i>	<i>NPI-40</i>
1.	Behaviour	<i>r</i>	0.034	-0.225	-0.083	0.000	-0.045
		<i>p</i>	( <i>ns</i> )	0.029	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )
2.	Attitude	<i>r</i>	-0.135	-0.028	-0.111	-0.152	-0.064
		<i>p</i>	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )
3.	Desire	<i>r</i>	0.189	0.036	0.153	-0.134	-0.054
		<i>p</i>	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )
4.	Sociosexuality	<i>r</i>	0.212	-0.048	0.130	0.043	0.002
		<i>p</i>	0.040	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )



**Table 3(b):****Correlations of 'dark triad' personality traits and risky sexual behaviour (sociosexuality)—female participants (n=113)**

			<i>Primary Psychopathy</i>	<i>Secondary Psychopathy</i>	<i>Psychopathy</i>	<i>MACH-IV</i>	<i>NPI-40</i>
1.	Behaviour	<i>r</i>	0.130	0.274	0.239	0.201	-0.167
		<i>p</i>	( <i>ns</i> )	0.003	0.011	0.033	( <i>ns</i> )
2.	Attitude	<i>r</i>	-0.158	-0.224	-0.231	-0.019	-0.195
		<i>p</i>	( <i>ns</i> )	0.017	0.014	( <i>ns</i> )	0.039
3.	Desire	<i>r</i>	0.162	0.103	0.167	0.089	0.039
		<i>p</i>	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )	( <i>ns</i> )
4.	Sociosexuality	<i>r</i>	0.253	0.334	0.356	0.138	0.103
		<i>p</i>	0.007	0.000	0.000	( <i>ns</i> )	( <i>ns</i> )

#### 4.6 **The prediction of risky sexual behaviour (sociosexuality) by ‘dark triad’ personality traits**

In the last analysis, ‘dark triad’ personality traits were used to predict risky sexual behaviour (conceptualized as sociosexuality). The results of regression analyses are displayed in Table 4 below. The behaviour component of sociosexuality was predicted by secondary psychopathy ( $p < 0.05$ ) in males. The behaviour component of sociosexuality was predicted by narcissism ( $p < 0.05$ ), and the Machiavellianism significance level was marginal ( $p < 0.05$ ) in females. Further, total sociosexuality was predicted by both secondary psychopathy ( $p < 0.05$ ) and overall psychopathy ( $p < 0.05$ ) in females. Total sociosexuality was also predicted by narcissism in females ( $p < 0.05$ ). Finally, total sociosexuality was also predicted by primary psychopathy in females, but the relationship was marginal ( $p < 0.05$ ). The attitude component of sociosexuality did not feature in any of the models. Hypothesis 3 predicted that all ‘dark triad’ personality traits would predict risky sexual behaviour (sociosexuality). Although there were relatively fewer statistically significant betas in this study, it appears that risky sexual behaviour (sociosexuality) was predicted mostly in females than in males. Therefore, hypothesis 3 is partially accepted.

**Table (4):**

**The prediction of male and female risky sexual behaviour (sociosexuality) from ‘dark triad’ personality scores**

“DT” <sup>1</sup> measures		Predictor variables											
		Behaviour			Attitude <sup>2</sup>			Desire			Sociosexuality <sup>3</sup>		
		$\beta^4$	<i>t</i>	<i>p</i>	$\beta^4$	<i>t</i>	<i>p</i>	$\beta^4$	<i>T</i>	<i>P</i>	$\beta^4$	<i>t</i>	<i>p</i>
Primary Psy <sup>5</sup>	M <sup>8</sup>	-0.101	-0.798	<i>ns</i>				0.097	0.827	<i>ns</i>	0.227	1.609	<i>ns</i>
	F <sup>9</sup>	0.022	0.210	<i>ns</i>				0.064	0.608	<i>ns</i>	0.214	1.800	0.075
Secondary Psy <sup>5</sup>	M <sup>8</sup>	-0.287	-2.257	0.026				0.009	0.079	<i>ns</i>	0.109	0.773	<i>ns</i>
	F <sup>9</sup>	0.143	1.387	<i>ns</i>				-0.038	-0.378	<i>ns</i>	0.283	2.470	0.015
Psychopathy	M <sup>8</sup>	-0.210	-1.646	<i>ns</i>				0.074	0.633	<i>ns</i>	0.216	1.526	<i>ns</i>
	F <sup>9</sup>	0.093	0.910	<i>ns</i>				0.023	0.225	<i>ns</i>	0.301	2.633	0.010
MACH- IV <sup>6</sup>	M <sup>8</sup>	-0.088	-0.684	<i>ns</i>				-0.209	-1.764	0.081	0.185	1.295	<i>ns</i>
	F <sup>9</sup>	0.185	1.715	0.089				0.062	0.584	<i>ns</i>	0.022	0.182	<i>ns</i>
NPI-40 <sup>7</sup>	M <sup>8</sup>	-0.090	-0.688	<i>ns</i>				-0.087	-0.723	<i>ns</i>	0.091	0.629	<i>ns</i>
	F <sup>9</sup>	-0.289	-2.720	0.008				-0.054	-0.513	<i>ns</i>	0.265	2.240	0.027

Note: <sup>1</sup>“DT” = ‘dark triad’ personality traits, <sup>2</sup>The Attitude variable has no values because it has been excluded from the respective models, <sup>3</sup>Total score of sociosexuality subscales, <sup>4</sup> $\beta$  = standardized regression coefficients, <sup>5</sup>Psychopathy, <sup>6</sup>MACH IV = Machiavellianism, <sup>7</sup>NPI-40 = narcissism, <sup>8</sup>M = male, <sup>9</sup>F = female

#### 4.7 **Conclusion**

This chapter focused on the presentation of study results, which included demographic information, and the relationship between the 'dark triad' personality traits and risky sexual behaviour (sociosexuality). Results from ANOVA indicated that male and female participants did not achieve different scores on most of the scales. Nevertheless, analysis was conducted separately for males and females, to follow existing practice among researchers. Correlation analysis results indicated that among males, primary psychopathy is positively associated with overall sociosexuality, and secondary psychopathy, on the other hand, is associated with the behaviour component of sociosexuality. None of the remaining associations between 'dark triad' personality traits and risky sexual behaviour (sociosexuality) reached statistical significance. Furthermore, regression analysis results show that there are significant gender differences amongst the 'dark triad' personality traits in terms of predicting risky sexual behaviour (sociosexuality).

## CHAPTER 5

### DISCUSSION

#### 5.1 Introduction

In the current chapter, the findings of the study are discussed in relation to existing literature. They are organized according to the hypotheses of the study. The chapter concludes by presenting the study's limitations, conclusions and recommendations.

Based on self-reports of 207 single participants used for analysis, data demonstrate that there are variations in how the 'dark triad' personality traits relate to features of risky sexual behaviour (sociosexuality), with gender apparently influencing the associations. This is not in line with several empirical findings that suggest that, when measured in a normal sample, correlates of the 'dark triad' personality traits will be the same (Paulhus et al., 2001). Findings of this study are in agreement with Williams and Paulhus' contention that when measured in normal populations, the 'dark triad' personality traits are "overlapping but distinct constructs" (Williams & Paulhus, 2002, p. 556).

#### 5.2 The comparison of male and female participants' 'dark triad' personality traits scores on risky sexual behaviour (sociosexuality)

The first hypothesis predicted that scores of males and females will differ for each of the major variables of the study. The present study found no gender differences of participants' scores on most of the 'dark triad' personality scales, and two of the four sociosexuality scales. These results are uncommon, since a large body of evidence suggests that males and females score differently on 'dark triad' personality traits and risky sexual

behaviour(sociosexuality) (Jonason et al., 2010a, 2009; Paulhus & Williams, 2002; Schmitt, 2005; Simpson & Gangestad, 1991). For sociosexuality, there are varied reasons to account for the differences of scores, including the differences of biological and psychological make-up between men and women (Buss & Schmitt, 1993, Jonason & Buss, 2012). With regards to the 'dark triad' personality traits, there is a tendency for males to score high on narcissism than females, even after controlling for factors such as age and income (Foster, Campbell & Twenge, 2003) and the relationship of Machiavellianism to a number of sexual correlates is mediated by sex (McHoskey, 2001), suggesting that there are underlying gender differences of the variable. Primary psychopathy was the only 'dark triad' personality trait that conformed to past findings (Forouzan & Cooke, 2005; Nicholls, & Petril, 2005; Nicholls, Ogloff, Brink, & Spindel, 2005), with males scoring higher than females.

Socialization factors may have affected the results. Lack of differences on the scores of the major variables of the study may have been a product of imprecise reporting. Females in this study could have underplayed their 'dark triad' traits and underreported their risky sexual behaviour (sociosexuality), because, as young girls, they learn from an early age that these traits and behaviours are unacceptable in females (Wallace, 2007).

### **5.3 The association between 'dark triad' personality traits and risky sexual behaviour (sociosexuality)**

It was expected in this study that there would be positive associations between both female and male participants' scores of the 'dark triad' personality traits and risky sexual behaviour (sociosexuality). The results indicate that among males, primary psychopathy is positively associated with overall sociosexuality and secondary psychopathy is negatively associated with the behaviour component of sociosexuality.

Machiavellianism, narcissism and overall psychopathy were not related to all dimensions of sociosexuality. The results are contrary to what was expected, because sociosexuality is associated with Machiavellianism, psychopathy and narcissism among men (McHoskey, 2001; Reise & Wright, 2006).

It appears that differentiating psychopathy in two types helped to show its association to risky sexual behaviour (sociosexuality) in this study. Primary psychopathy is the manipulative, selfish and uncaring dimension of psychopathy and secondary psychopathy encompasses self-defeating tendencies and impulsivity (cf. Levenson et al., 1995, p.152). The results suggest that whilst it was expected that primary psychopathy would escalate risky sexual behaviour (sociosexuality) in this particular group of males, secondary psychopathy may actually lead to lower involvement in sexually risky behaviour. It is not clear why this is so. However, it could be that secondary psychopathy would limit its involvement in sexually risky behaviour, an aspect of sociosexuality that requires manipulativeness, social participation and lack of fear. Secondary psychopathy is antithetic to these, as it is characterized by submissiveness; anxiousness and social withdrawal (cf. Ali & Chamorro-Premuzic, 2010).

Among females, there were relatively more statistically significant associations between the 'dark triad' scores and different features of sociosexuality. Primary, secondary and overall psychopathy types were positively related to overall sociosexuality. However, the nature of the relationship of 'dark triad' personality traits depends on the particular type of risky sexual behaviour (sociosexuality). All three psychopathy versions, together with narcissism, were negatively related to the attitude dimension. But secondary and overall psychopathy versions, together with Machiavellianism, were positively related to the behaviour dimension of sociosexuality. It appears that women with 'dark triad' personality traits hold

views or attitudes that are typically feminine, that is, finding short-term sexual relations disagreeable. Yet, when it comes to the actual behaviour, psychopathic and Machiavellian traits are inclined to engage in casual sex. This makes more sense when it is taken into account that, unlike in men, heightened sociosexuality scores in females are not related to sexual aggression (Yost & Zurbriggen, 2006). Instead, sociosexuality or engagement in casual sex is found to be linked to the females' desire to violate traditional roles of passivity and compliance associated with their gender.

#### **5.4 The prediction of risky sexual behaviour (sociosexuality) by 'dark triad' personality traits**

It was expected in this study that all 'dark triad' personality traits will be robust predictors of risky sexual behaviour (sociosexuality). Results indicated that very few 'dark triad' personality traits had the capacity to predict risky sexual behaviour (sociosexuality) in this sample. Only secondary psychopathy could predict the behaviour dimension of sociosexuality among male participants, and the beta value was negative. Among female participants, overall sociosexuality was predicted by secondary psychopathy, overall psychopathy and narcissism. All the betas were positive. Only narcissism predicted the behaviour dimension of sociosexuality among female participants. The main point about the results is that, first, as in the correlations analysis, there were comparatively more factors associated with risky sexual behaviour (sociosexuality) among females in this sample, and second, that, apparently, sociosexuality is linked to a different personality constellation in females than it is in males (Yost & Zurbriggen, 2006).



## 5.5 **Conclusions**

The study examined the similarities and differences that exist amongst members of the 'dark triad' personality traits and their differential attitudes towards risky sexual behaviour (conceptualized as sociosexuality). Although there were no differences between the mean scores of males and females on the major variables of the study, gender proved to be an important variable. This study highlighted the need to study males and females separately. For instance, McHoskey's (2001) call that attention be paid on how personality constructs such as Machiavellianism and psychopathy play out in males and females, was found to be justified. McHoskey (2001) specifically warns that it is no longer defensible to study constructs such as Machiavellianism and psychopathy only among males, at the exclusion of women, since this approach limits the development of knowledge. The results of the study did not seem to conform to what is already known in the literature. Therefore, the findings of the study should be accepted with caution, until they are replicated.

## 5.6 **Limitations of the study**

A number of limitations can be cited regarding this study. Data were collected through self-reports, which, however, is a data-collection method prone to intentional distortion. Future research should use methods that do not depend on self-reports, such as observational methods and reports from others who know the participants well. Lack of variability of the sample should also be noted as a major limitation in this study. Subjects were seemingly from a certain religious affiliation, which might have greatly affected the results of this study. The study sample was primarily university students of African descent, which limits generalizability of the findings to other ethnic groups. Thus, the generalizability of the findings

needs to be demonstrated through replication in a more representative sample from the general population.

## **5.7 Recommendations**

The present study focused on the association between 'dark triad' personality traits and risky sexual behaviour (sociosexuality) amongst African students at a Historically Black University. The researcher recommends that future studies should include other ethnic groups and other non-traditionally Black tertiary institutions where ethnic groupings may be more diverse. A further recommendation is that more sexual correlates should be added to supplement sociosexuality. In that way, the results will become clearer and more cogent.

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## Appendix: Covering Letter

MAUDA LESLEY  
Psychology Discipline  
School of Social Sciences  
Faculty of Humanities  
Private Bag X1106  
Sovenga, 0727



Dear Prospective Participant,

My name is Lesley Mauda. I am currently studying for a Master's degree in Clinical Psychology at the University of Limpopo. I am conducting a research titled: **Different Personality Types and Their Day-to day Sexual Activities**, which forms part of the completion of my degree. Your participation in this study is voluntary. The questionnaire consists of 15 pages including the cover page. Before filling it in, please read the instructions carefully. Where you do not understand, do not hesitate to ask for help.

**Are you willing to participate in this study?**

YES	NO
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If you answered "NO" to the above question, please stop and do not answer any further questions. I thank you for your time. If you answered "YES", it means that you are willing to participate, so please continue.