The relationship between attachment and offending within a South African context

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Declaration

No portion of this work has been submitted in support of an application for a degree or qualification of this or any other university or institute of learning. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signed by candidate

Signed: Megan Barber

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Abstract

International research has consistently documented a link between attachment and offending. Despite South Africa's high crime rate, research within this country's socio-political context has been limited. This current study aimed to fill this gap, by examining the association between attachment and offending within a South African context. It was hypothesised that: H1, an insecure attachment would occur more frequently in offenders than non-offenders; H2, high attachment-related avoidance would be positively associated with offending; H3, high attachment-related avoidance would be positively associated with antisocial behaviour; and H4, an insecure mother attachment would be more strongly associated with offending than an insecure father or intimate partner attachment. Two groups of participants were recruited: offenders (n = 49) and a community sample (n = 63). Each participant completed a questionnaire measuring attachment to mothers, fathers, and intimate partners, as well as socio-economic status and antisocial behaviour. Using a series of statistical tests including chi-square, logistic regression, and hierarchical multiple regression, the study found support for H1 and H2, whilst rejecting H3 and H4. Overall, this study found that insecure attachment, and specifically high attachment-related avoidance, was positively associated with offending. Conversely, it was found that low avoidance was associated with antisocial behaviour and that there was no association between specific domains (mother, father and intimate partner) of attachment and offending. These results provide support for the application of attachment theory to offenders within the South African context.

Keywords: Attachment, Attachment-related Anxiety/Avoidance, Offending, Antisocial Behaviour, South Africa, ECR-R, STAB

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Chapter 1: Introduction

When compared to international statistics, South Africa has one of the highest crime rates, with a recorded 2 183 001 crimes committed between 2015 and 2016 (Crime Stats SA, 2016). For well over a decade, international forensic psychologists have been theorising about the pathways to crime, and providing insight into such behaviour. Forensic Psychology as a field of study is, however, not recognized in South Africa. The inability to be able to train and register as a forensic psychologist in South Africa, means that local psychologists rely on international statistics and theories. Thus South African professionals are falling behind in understanding the specific psychological dynamics that contribute to offending in our particular cultural context

Internationally it has been found that 5 to 6% of all offenders are responsible for 50% of offences (Moffitt, 1993), indicating that offending is very often associated with high rates of recidivism. As the majority of offences are committed by a minority of offenders over time, identifying key risk factors and effective early intervention therefore can reduce the crime rate of a country. Without understanding offending within a South African context, we are unable to address these behaviours appropriately which results in the perpetuation of crime.

There are a number of international theories that attempt to explain offending with some popular theories being: control theory (Rankin & Kern, 1994), social learning theory (Krohn, 1999), social capital theory (Ferguson & Mindle, 2007), strain theory (Katz, 2002), risk and protective factors (Fagan, van Horn, Antaramian, & Hawkins, 2011; Losel & Farrington, 2012), and attachment theory (Ward, Hudson, & Marshall, 1996). Notably, all these theories have found the family home to be a key foundation for facilitating prosocial development in youth, pointing towards the particular significance of attachment theory. This premise is supported by Katz (2002) who argues that only through a fuller exploration of attachment and its link to offending can one begin to appropriately address criminal behaviour.

Attachment theorists have found that a poor or insecure attachment to one's primary caregiver increases the odds that the child will offend or develop antisocial behaviour later in life (Smallbone & Dadds, 1998). The link between insecure attachments and offending has gathered extensive support from many researchers, who found this connection in young children (Cyr, Pasalich, McMahon, & Spieker, 2014; Wagner, Mills-Koonce, Willoughby, Zvara, & Cox, 2015), adolescents (Armsden & Greenberg, 1983; Rankin & Kern, 1994), and adults (Hoeve et al., 2007). Nonetheless, there is still a lot that is unknown about the specific types of attachment that are associated with offending and antisocial behaviour. The current study attempts to address this gap.

1.1: Outline of Attachment Theory

Attachment theory, which was founded by John Bowlby, is the most comprehensive theory on the development of a child-caregiver relationship to date (Del Guidice, 2009). Bowlby (1969) identified how organisms adjust to their environments to increase their rate of survival, which he coined 'attachment behaviour'. Essentially attachment behaviour can be attributed to any action that increases physical proximity with a caregiver in order to ensure that a child feels the highest level of security possible "given the particular limits and possibilities of their caregiver" (Zeger, Schuengel, van IJzendoorn, & Janssens, 2008, p. 92). These adjustments ensure that a child is able to be safe and explore the world (Riggs, 2010).

In light of this, infants and children can be classified into two groups: having either a secure or an insecure attachment pattern with their primary caregiver. According to Bowlby's (1969) theory, an attachment classification can be derived from the infant or child's behaviour in relation to their caregiver. A secure attachment provides the child with a safe base from which to explore the world where the caregiver is responsive to the needs of the child (Balasingham, 2008). This has been associated with higher degrees of well-being in adulthood (Armsden & Greenberg, 1983; Raudino, Fergusson, & Horwood, 2013) and

resilience to adverse life events (Turanovic & Pratt, 2015). In contrast, an insecure attachment is when a child adapts to how they think their caregiver will respond to them (Balasingham, 2008). Such an attachment pattern has been linked to insensitive, inconsistent, or rejecting caregivers (Lyon-Ruth, 1996). This attachment pattern has been associated with various difficulties in adulthood such as offending, poor psychosocial adjustment, poor interpersonal relationships, and an increased risk for mental illness (Bakermans-Kranenburg & van IJzendoorn, 2009; Ilicento et al., 2012; Riggs, 2010).

Developing Bowlby's work on attachment, Mary Ainsworth (1979) later identified two types of insecure attachment, namely, anxious/ambivalent and avoidant. Anxious/ambivalent attachment is marked by a caregiver's inconsistent and unpredictable parenting style, commonly causing the child to display more impulsive, helplessness, and attention-seeking behaviour (Balasingham, 2008). Avoidant attachment has been linked to detached caregivers resulting in the child displaying hostility, increased aggression, and lack of empathy (Mannikko, 2001).

Later, Main and Soloman (1986) found a third category for insecure children, disorganised-disoriented attachment. This grouping accounted for children who did not adhere to the classifications for anxious/ambivalent and avoidant attachment as described above. Disorganised-disoriented attachment is marked by a fearful response to the caregiver and is often an attempt by the child to take control of their relationship (Burk & Burkhart, 2003).

The attachment patterns that have developed during childhood start becoming internalised at about 12 months. This process of internalisation provides the child with an understanding and expectation of how the world works with regards to interpersonal interactions, and has been named the Internal Working Model (IWM) (Bretherton, 1990). IWMs are considered to mirror the childhood attachment pattern, as they are built on the

information learnt during this period to make sense of human interactions (Borelli, Goshin, Joestl, Clark, & Byrne, 2010). Therefore, early attachment experiences impact a person's IWM of the self and other by "memories of attachment-related experiences; beliefs, attitudes, and expectations of self and others in relation to attachment; attachment related-goals and needs; and strategies and plans for achieving attachment-related goals (Mannikko, 2001, p. 13). Similar to childhood attachment, IWMs help one to interpret and anticipate the actions or reactions of others, which in turn helps a person to plan their own behaviour (Ainsworth, 1979).

The classifications of adults' IWMs are based on the childhood attachment groupings. As IWMs are now considered an automatic function of childhood attachment, they are given different names, as laid out in Table 1. Secure attachment remains a secure IWM, avoidant attachment results in a dismissing IWN, anxious-ambivalent attachment is linked to a preoccupied IWM, and a disorganised attachment results in a fearful IWM (Renn, 2002). A secure IWM is evident in a person who has a good internalised sense of self-worth, holding a positive view of both themselves and others (Mitchell & Beech, 2011). A preoccupied adult continuously attempts to gain acceptance and validation from others, and is extremely anxious about relationships in general (Bakermans-Kranenburg & van IJzendoorn, 1993). These types of adults expect the other to provide security for them. Thus preoccupied adults hold a positive view of others, but a negative view of themselves. A person with a fearful IWM believes they are unlovable, depends on others' acceptance of them, and holds a negative view of others (Backstrom & Holmes, 2007). Such adults avoid discomfort and avert pain of loss and rejection, by attempting to evade relationships. A dismissing adult will tend to avoid closeness, and often downplays the value of close relationships (Dutton & White, 2012). Such individuals have a positive view of themselves, but a negative view of others.

Table 1

Childhood Attachment Patterns vs. Adult Internal Working Models

Childhood Attachment Patterns	Adult Internal Working Models
Secure	Secure
Avoidant	Dismissing
Anxious-Ambivalent	Preoccupied
Disorganised	Fearful

Although researchers initially classified people into these four taxometric measures of attachments, it has been argued that these categories do not adequately capture the complexity of human attachment behaviour (Waters & Beaucharne, 2003). Dwyer (2005) drew attention to the fact that some people fall between these categories. Therefore, although these taxometric categorisations of attachment behaviour simplify our understanding of human behaviour, they inadvertently result in an unjustifiable loss of detail. Such debates have resulted in researchers arguing that attachment is better measured on two orthogonal dimensions. Such measures provide a more nuanced and comprehensive explanation of human attachment behaviour (Bartholomew & Shaver, 1998; Mannikko, 2001). Fraley, Waller, and Brennan (2000) found evidence that the dimensions of anxiety and avoidance can account for all the different attachment styles. For a graphic rendering of the Anxiety-Avoidance Continuum see Figure 1: Anxiety-Avoidance Continuum (Shaver & Fraley, 1997). Using these parameters, a secure attachment is characterised by low anxiety and low avoidance, whilst a preoccupied attachment is characterised by high anxiety and low avoidance. A fearful attachment is associated with high anxiety and high avoidance. In contrast, a dismissing attachment involves low anxiety and high avoidance. This reconceptualisation of attachment along two dimensions adds to the initial categorisation theory, providing one with richer detail into the experiences of an individual's attachment

formation. It is for these reasons that this current research used the orthogonal dimensions of anxiety and avoidance to conceptualise and measure attachment.

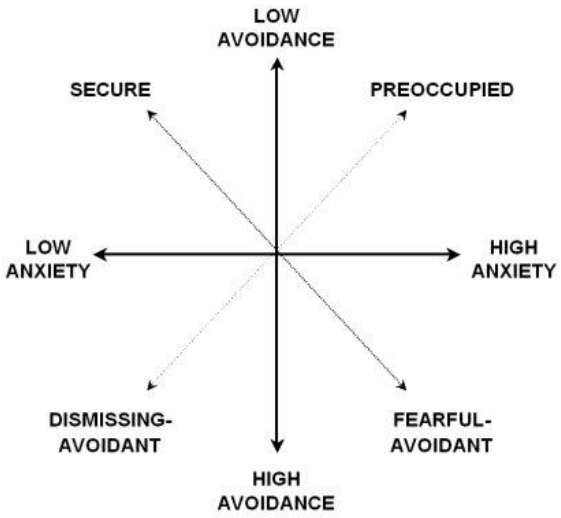

Figure 1: Anxiety-Avoidance Continuum (Shaver & Fraley, 1997)

Although the universality of attachment theory is still debated, there is evidence to suggest that it can be appropriately applied cross culturally. Schmitt et al. (2004) investigated the cross cultural applicability of adult attachment theory, and stated that "it is reasonable to tentatively conclude that in nearly all cultures, people possess basic cognitive-emotional attitudes that constitute romantic attachment" (p. 397). Their findings also identify more intracultural variation of attachment, compared to intercultural difference. Futhermore, van IJzendoorn and Bakerman-Kranenburg's (2010) study supports the cross-cultural application of attachment theory, although the authors highlight the need for more research to be done in Africa.

1.2: Attachment and Offending or Antisocial Behaviour

Offending is defined in this current study as any behaviour that has resulted in a person being found to break the law, according to their country's criminal justice system. Antisocial behaviour on the other hand is behaviour that demonstrates a disregard for another person,

but does not necessarily lead to criminal activity (American Psychiatric Association, 2013). Essentially, antisocial behaviour can be broken down into three groups of behaviours: social aggression, physical aggression, and rule breaking (Burt & Donnellan, 2009).

Two reviews of empirical data show a significant link between attachment and offending or antisocial behaviour (Hoeve, et al., 2012; Ogilvie, Newman, Todd & Peck, 2014). In Hoeve et al.'s (2012) review it was found that insecure attachment to both parents was significantly linked to delinquency in adolescent males and females. These results were supported by Ogilvie et al. (2014) who examined adult offenders. Ogilvie et al. (2014) found a connection between insecure attachment and all types of offenders (sexual, violent, non-violent, and domestically violent). Ogilviw et al (2014) finding has been supported by numerous researchers who found a similar connection between insecure attachment and child molesters (Bogaerts, Vanhuele, & Dedereq, 2005), high security prisoners (Levison & Fonagy, 2004), sex offenders (Marsall, Serran, & Cortoni, 2000; McKillop, Smallbone, Wortley, & Andjic, 2012), violent offenders (Schimmenti, et al., 2014), and antisocial behaviour in children (Kim, Kochanska, Boldt, Nordling, & O'Bleness, 2014; Koschanska & Kim, 2012) in Belgium, Canada, Australia, America, and Italy respectively.

Although the research above demonstrates a strong link between insecure attachment and offending, Ross and Pfafflin (2001) found in their study that not all offenders were insecurely attached. Ross and Pfafflin's (2001) finding was supported by Austin (2011), who found a higher proportion of securely attached adults in a forensic psychology population than initially expected. The findings of these studies highlight the important point that although insecure attachment may be a risk factor for offending, it does not conclusively predict offending (Hoeve et al., 2007). This in turn highlights the complexity of offending behaviour, demonstrating that it develops from multiple risk factors. In fact, van IJzendoorn

and Feldbrugge (1997, p. 456) go so far as to warn that an "insecure attachment may be a general mental health risk factor, rather than a specific determinant" of offending.

These contradictory results do not undermine the relationship between attachment theory and offending or antisocial behaviour. Instead they emphasize that more research is needed to tests the limits of this theory within offending samples. In response to the growing evidence for the connection between insecure attachment and offending, researchers began focusing on insecure attachment and specific classifications of crime. Two of the main theories to develop from this are The Integrated Theory of Sexual Offending and Dutton's Theory of Intimate Partner Violence (IPV). A brief overview of these theories is presented below.

1.2.1: The Integrated Theory of Sexual Offending

In 1990, Marshall and Barbaree provided the first integrated theory of sexual offending by considering the influence of biological, childhood, social and situational factors. Attachment theory was at the foundation of this theory, and used to demonstrate how an insecure attachment with a primary caregiver provides fertile ground from which adult sexual offending can develop (Marshall & Marshall, 2000). This theory of sexual offending effectively argues that poor childhood attachment results in an increased risk of sexual abuse, which can lead to earlier onset of masturbation and using sex as a coping strategy. As a person with insecure attachment struggles to form healthy intimate connections, the Integrated theory of Sexual Offending emphasises the extent to which sexual fantasies have the potential to get coupled with an increased desire for control and power. In a particular context of self-induced or externally induced disinhibition, a person may be more prone to sexual offending (Marshall & Marshall, 2000).

This theory has been supported by numerous researchers who have investigated the attachment of sexual offenders. These studies have found that sexual offenders have a much

higher propensity to hold an insecure attachment than non-sexual offender and community samples (Bogaerts, Vanheule, & Desmet, 2006; Jamieson & Marshall, 2000; Jore, Green, Adams, & Carnes, 2016; Marshall, 2010; Miner, Romine, Robinson, Berg, & Knight, 2016; Ward, et al., 1996). The Integrated Theory of Sexual Offending has been further developed, with subsequent researchers finding that rapists were more likely to have an avoidant or dismissive attachment (Ogilvie, et al., 2014; Stirpe, Abracen, Stermac, & Wilson, 2006), whilst offenders who committed sexual offences with children were more likely to have anxious-ambivalent, or preoccupied attachments (Miner, et al., 2016; Ogilvie, et al., 2014; Sawle & Kear-Colwell, 2001).

Although initially these findings present a neat and clear picture for support for The Integrated Theory of Sexual Offending, the more one investigates the relationship between different attachment patterns and types of sexual offending in existing research, the more complex and blurred the picture becomes. For example, two studies (Armstrong & Mellor 2016; Lyn & Burton, 2004) found that sexual offenders were more likely to have a fearful attachment style. Woods and Riggs (2008), on the other hand, found that child sexual offenders were more likely to be high in attachment-related anxiety, but only when considering romantic relationships. In addition, there has been empirical research that indicates no differences in attachment styles between sexual and non-sexual offenders (Abrecen, Looman, Di Fazio, Kelly, & Stirpe, 2006; Baker & Beech, 2004; Marsa, et al., 2004). These contradictory results not only highlight holes in the current theory, but indicate the need to step back and look at the bigger picture of offending. Specifically, instead of distinguishing between varieties of offending when assessing attachment, one needs to rather look at the propensity to offend.

1.2.2: Dutton's Theory of Intimate Partner Violence (IPV)

Dutton's theory of IPV was developed in response to the contradictory research found in connection with The Integrated Theory of Sexual Offending. It is based on the premise that sexual and non-sexual offending are often co-occurring (Dutton & White, 2012). Dutton's research theorised that partner abuse research may be able to provide a more comprehensive account of sexual offending. Based on Bowlby's (1969) principles of attachment theory and how adult interpersonal connections are formed through these childhood experiences, Dutton hypothesized that a person who has "chronically frustrated attachment needs expresses themselves in 'intimacy anger' and affective instability" (Lyn & Burton, 2005, p.129). Within the results of this research, the interplay between an insecure attachment and anxiety or anger was found to be fundamental to IPV. Thus IPV can be associated with the attachment makeup of the perpetrator (Dutton, Starzomski, Saunders, & Bartholomew, 1994). Many researchers have found support for Dutton's theory of IPV in both men (Buck, Leenaars, Emmelkamp, & van Marle, 2012; Lawson, 2008) and women (Carney & Buttell, 2005), and in court-mandated and volunteered IPV treatment groups (Buttell, Muldoon, & Carney, 2005).

In addition to the link between insecure attachment and IPV, Dutton et al. (1994) found that perpetrators of IPV are more likely to have a fearful or preoccupied attachment style. There are several studies that support the link between preoccupied attachment styles and IPV (Babcook, Jacobson, Gottman, & Yerington, 2000; Holtzworth-Munroe, Stuart, & Hutchinson, 1997; Kim & Zane, 2004). However, as is the case with The Integrated Theory of Sexual Offending, these finding are generally inconsistent and contradictory. For example, Babcook, et al. (2000) add to the above findings, indicating that IPV perpetrators were as likely to be classified as having a dismissing attachment as they were to have a preoccupied attachment style. This was partially supported by Buck, Leenaars, Emmelkamp

and van Marle (2012) who found that IPV perpetrators were more likely to have a dismissing attachment pattern. Similarly, McKee, Roring, Winterowd, and Porras (2012) found that IPV perpetrators were more likely to have high attachment-related avoidance.

Both the Integrated Theory of Sexual Offending and Dutton's Theory of IPV acknowledge the heterogeneity of offending by focusing on specific types of offences. Acknowledgment of the heterogeneity of crime is useful in understanding the specific pathways leading to a certain category of criminal offending, however, it is rare that an offender would only be involved in just one type of crime during their criminal career (Moffitt, 1993). Thus this narrowed research approach that throws up contradictory results, risks undermining the fact that there is a significant documented link between insecure attachment and general offending. As the above mentioned studies demonstrate, if research gains too narrow a focus, it becomes inappropriate to generalize the results for the broader context of offending and antisocial behaviour. Such an approach leaves gaps in our understanding of the link between attachment and offending, which will be demonstrated below.

1.3: Specific Attachment Patterns linked to Offending or Antisocial Behaviour

As demonstrated in section 1.2: Attachment and Offending or Antisocial Behaviour, research shows a clear link between insecure attachment and offending. In the exploration of both The Integrated Theory of Sexual Offending and Dutton's Theory of IPV above, it was documented that research had begun to explore specific attachment patterns and their association with sexual offending and IPV respectively. Despite the move in research to focus on specific attachment patterns linked to specific crimes, limited research has explored attachment theory within the broader context of offending and antisocial behaviour (Hoeve et al., 2012). The research that has investigated this association between specific attachment patterns and general offending is similar to those studies investigating sexual offending and

IPV, as they produce inconsistent results. Making it exceptionally difficult to draw conclusions about what type of insecure attachments are linked to general offending or antisocial behaviour. The following sections will discuss the research that explores specific attachment patterns and general offending or antisocial behaviour. Initially the literature linking high avoidance to offending will be explored, followed by an examination of the evidence for the link between high anxiety and offending.

Three studies (Hansen, Waage, Eid, Johnsen, and Hart, 2011; Levinson & Fonagy, 2004; Stirpe, et al., 2006) found that a dismissing attachment (marked by low anxiety and high avoidance) was most common amongst prisoners. Although the results of Levinson and Fonagy (2004) supported the above mentioned finding, this was only the case when personality disorders were controlled for. Similarly, Ogilvie et al.'s (2014) review found that dismissing attachment occurred more frequently in offenders without mental disorders.

Two further studies (Bakermans-Kranenburg & van IJzendoorn, 2009; Frodi, Dernevik, Sepa, Philipson, & Bragesjo, 2001) found a link between dismissing attachment and externalising behaviour. Externalising behaviour refers to the projection of emotions into negative behaviours that are directed at something in the environment, for example a person punching a wall in response to being angry. Similarly, Balasingham (2008) found a link between dismissing attachment and antisocial behaviour.

Supporting these results using a continuous measure of attachment, two studies (Goldstein & Higgins-D'Alessandro, 2001; Hansen, et al., 2011) found a link between high attachment-related avoidance and offending in American and Norwegian prison samples. This finding is supported by Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsley, and Roisman's (2010) meta-analysis, which showed that high attachment-related avoidance, was linked to an increase in externalising behaviour in adolescence.

Although evidence for high attachment-related avoidance and offending has been explored, research has also found links between high anxiety and offending. A meta-analysis conducted by Hoeve et al. (2012) found that adolescents in detention settings seemed to show an increase in disorganised (fearful) attachment when compared to the average population. Similar findings were obtained by Schimmenti, et al. (2014), who showed that fearful attachment was significantly linked to violent offending in a sample of Italian adults. Two studies (Baer & Martinez, 2006; Pasalich, Dadds, Hawes, & Brennan, 2012) also found that fearful attachment was linked to externalising behaviour in adolescence.

It is significant at this point in the discussion to note that a fearful attachment is characterized by high anxiety and high avoidance, whilst a preoccupied attachment is marked by low avoidance and high anxiety. As such, Zeger et al. (2008), studying a group of juvenile boys in an institutional setting, found that the fearful and dismissive groups showed the greatest tendency towards violence. Preoccupied boys, on the other hand were more likely to be truant, break rules, and display other externalising behaviours. Balasingham (2008) supported this latter result and found that preoccupied attachment was associated with gang involvement. Linked to this, although using a continuous measure of attachment and an adult sample, Ogilvie et al. (2014) found a small significant correlation (0.36) between attachment-related anxiety and offending. Similarly, Bekker, Bachrach, and Croon (2007) found that attachment-related anxiety had a strong direct and positive effect on antisocial behaviour for men.

Examination of the literature presented here, indicates that high attachment-related avoidance is more likely to be connected to offending and antisocial behaviour than other types of attachment. However, some association has also been found between high attachment-related anxiety and externalising or antisocial behaviour, as well as IPV and the perpetration of child sexual abuse. These conclusions find support for Renn's (2002) study

that found that attachment-related avoidance was connected with crimes that show a lack of empathy towards another. Despite these links, three things become apparent when examining this research.

First, the majority of these studies measure different outcome variables, specifically: offending, antisocial behaviour, or externalising behaviour. As such, the use of different outcome variables makes it difficult to compare studies and draw any conclusions from them. Since the majority of these studies have used an incarcerated sample, testing the applicability of such a theory to low-risk offenders is important. Low-risk offenders are those offenders who are not considered to be a high threat to society, resulting in the use of alternative sentencing procedures, such as diversion programs.

Second, these studies use different samples groups of different ages with some focusing on adolescents, and others on adults. When comparing studies with such different samples, Moffitt's theory of offending (1993) becomes highly relevant as it distinguished between adolescent-limited antisocial behaviour and life-course persistent antisocial behaviour. According to Moffitt (1993), comparing adolescent-limited and adult-persistent antisocial behaviour samples is inappropriate because they are distinctly different in development and persistence. Further exploration into these differences is beyond the scope of this paper. Nonetheless, if the samples of the studies are different, the conclusions that one is able to draw from comparing them are significantly restricted. A comparison of the abovementioned studies also draws attention to the lack of existing research dealing specifically with attachment and offending or antisocial behaviour in adults.

Third, since different studies have used different measures of attachment, it is difficult to compare them. Although, as exemplified above, continuous and taxonomy measures of attachment do assess the same construct on a basic level, they cannot easily be compared. For example, although a dismissing attachment is marked by high avoidance, it also includes

low anxiety, and is therefore a combination of both these elements. The continuous measure of attachment only considers one element at a time, making it difficult to accurately compare studies. In order to explore the connection between attachment-related anxiety and avoidance in greater detail, more research using this continuous measure of attachment is needed.

1.4: Domains of Attachment

All the studies discussed above address the relationship between types of attachment and offending or antisocial behaviour. However, they fail to specify which domain of attachment was measured, specifically, mother, father or intimate partner. According to Jonason, Bethell, and Lyons (2013) the type of attachment figure has an influence on behaviour. More specifically, Jonason et al. (2013) found that low paternal care was connected to increased externalising behaviour, whilst low maternal care led to a decrease in internalising functioning. Internalising functioning here refers to the extent to which a person is able to integrate attitudes, values, and other's opinions into their identity, aiding their moral development. Two additional studies (Bogaerts, Vanheule, & Declercq, 2005; McKillip, et al., 2012) support the conclusion that different attachment domains have different roles in the development of offending. In studying the attachment patterns of child-molesters, Bogaert et al. (2005) found that insecure maternal attachment predicted offending, whilst separation from a father or father-like-figure was also related to an increase in offending behaviour. Contrastingly, McKillop et al. (2012) found in male child sexual abusers, that offenders reported significantly more insecure attachment to their fathers than mother. These studies emphasise the different roles that each attachment figure potentially plays in the development of a person and their subsequent offending behaviour.

Although limited research supports the premise that insecure paternal attachment can be linked to offending, it has been found that an insecure maternal attachment is linked to externalising behaviour (Bakermans-Kranenburg & van IJzendoorn, 2009; Fearon et al.,

2010). This supports Bowlby's (1944) early works that investigated the link between maternal deprivation and offending, and found that separation from a mother was associated with later delinquency. It is significant to note too that two studies (Marshall, et al., 2000; Smallbone & Dadds, 1998) found that insecure maternal attachment predicted sexual offending. Although Ward et al. (1996) did not assess parental attachments, their study into sexual and violent offenders indicated that such a sample were more likely to have dismissing attachments with their intimate partners.

What can be concluded from the studies discussed above is that, first, there is not much research that explores or accounts for domains of attachment. This is either because researchers have not measured multiple domains of attachment or they have used the Adult Attachment Interview, which is a measure not linked to a specific attachment figure (Crowell, Fraley, & Shaver, 2008). Second, the research that does look at domains of attachment, has merely argued for the importance to consider this area. As such, the research has not actively measured the different domains of attachment in relation to offending behaviours, thus leaving a gap in the literature. As is suggested by the studies discussed above, the attachment figure, specifically the mother, potentially has an impact on offending. Consequently, this current research aims to address the gap in the existent research by looking at three domains of attachment – maternal, paternal, and intimate partner – in relation to the development of offending behaviour.

1.5: Relevance to the South African Context

South Africa has an unusually high crime rate and propensity towards violence (Stein, 1996). This has developed out of a uniquely volatile and violent past (Souverein, Ward, Visser, & Burton, 2016). Exploring the contextual dynamics influencing South African offenders would help to address the country's propensity towards violence and offending, by providing Psychologists and government with a deeper understanding of such behaviour. In

order to begin to understand the factors influencing a citizen's potential to offend within the South African socio-political context (both past and present); one would need to test the cross-cultural applicability of international theories such as attachment theory.

The research reviewed in this dissertation has covered a range of countries and cultures, such as Norway, Italy, Australia, and America. It is important to note that none of the studies discussed in this dissertation have been conducted in South Africa, as there were no applicable studies available. The international research points towards a significant link between attachment theory and offending/antisocial behaviour in spite of sample location and cultural context, which indicates the potential to apply attachment theory to different culture context. It would, however, be inappropriate to assume a cross cultural application to South Africa, without a study specifically exploring this.

Although no research has primarily investigated the link between attachment and offending or antisocial behaviour in South Africa, two different qualitative studies do provide evidence that such a connection may be relevant in this context. Research by Gould (2015) and Matthew, Jewkes, and Abrahams (2011) found that incarcerated offenders were more likely to report markers of an insecure attachment in childhood. Neither of these studies specifically measured attachment, and since they were both qualitative, generalising these results would be inappropriate. Yet they do suggest that similar trends may be apparent within the South African context.

However, neither of these studies focused on low risk offenders. According to the National Institute of Crime Prevention and Reintegration Organisation (NICRO) Annual Report (2016), low risk offenders made up 13.8% of nationally sentenced offenders in 2016. Nevertheless, there are no publically available statistics on the demographic profile or other characteristics of this population, either nationally or in the Western Cape. Given South Africa's high crime rate and the lack of research in this area, the application of attachment

theory to low-risk offending and antisocial behaviour within a specifically South African context needs to be explored.

1.6: The Current Study

The current study aimed to fill the gaps identified in the literature by applying attachment theory to low-risk offenders in South Africa. This research specifically looked at the orthogonal dimensions of attachment (avoidance and anxiety) and the relationship that these have with offending and antisocial behaviour. Based on the literature presented above, the following were hypothesised: H1: insecure attachment will occur more frequently in offenders than in non-offenders; H2: high attachment-related avoidance will be positively related to offending; H3: high attachment-related avoidance will be positively related to antisocial behaviour; and H4: an insecure attachment to the mother will be more strongly associated with offending than an insecure attachment to the father or intimate partner.

Chapter 2: Method

2.1: Design

Based on the literature, the central aim of this study was to investigate the relationship between attachment theory and offending within a South African context. Quantitative research was chosen as this allowed the researcher to test the relationship between attachment and offending, subsequently allowing the research hypotheses to be tested. A cross-sectional and correlational design was used. Two groups of participants were recruited: offenders and a community sample (non-offenders).

2.2: Sample

The sample was made up of 112 participants who were divided into two groups: offenders (n = 49) and a community sample (non-offenders) (n = 63). Both samples were collected using a convenient sampling technique (Babbie & Mouton, 2006). The community sample was recruited from the University of Cape Town using the Student Research Participation Programme (SRPP), where students received course credits in exchange for completing the questionnaire. The inclusion criterion for this group was that participants had to be above the age of 18. There were initially 72 respondents, though an examination of the participant's student numbers (that were provided for the purpose of giving SRPP credits) indicated that 8 participants had completed the questionnaire twice. In these instances, the second questionnaire – as determined by the timestamp – was removed to avoid any practice effect that may have resulted from completing the questionnaire twice (Matthew & Ross, 2010). Of the 64 UCT students to complete the study, 63 were non-offenders. One student reported having been found guilty of a criminal offence, and was therefore allocated to the offender group. The mean age of the non-offender participants was 21 years, with a range of 18 to 47 years. There were only two instances of missing data in the age field.

The offending participants were recruited from the National Institute for Crime Prevention and Reintegration of Offenders (NICRO), in Cape Town South Africa. NICRO is a non-governmental organisation (NGO) that works with offenders in a rehabilitation capacity, as well as running alternative sentencing and diversion programs. The inclusion criteria for this group was that participants had to be over the age of 18 and had committed a criminal offence as decided on by the South African criminal justice system. The offending group originally consisted of 50 participants. However, one questionnaire had insufficient information (i.e. only demographic data was filled in), resulting in that case being removed from the analysis. This left 49 participants in the offending sample, with a mean age of 29 years, ranging from 18-61 years.

Demographic characteristics of the two groups are displayed in Table 2. An examination of the table indicates that the groups were similar on most variables except marital status and level of education. A series of chi-square tests indicated that there were no significant differences between the two groups on sex (χ^2 (1, N = 112) = 0.24, $p > .05$), race (χ^2 (3, N = 112) = 2.60, $p > .05$), and household family income (χ^2 (1, N = 112) = 2.05, $p > .05$). However, a significant difference was found for level of education (χ^2 (2, N = 112) = 26.95, $p < .001$), with offenders having a higher chance of having a highest level of education below grade 12. The contingency table for marital status did not uphold the assumption of expected frequencies being equal to or bigger than 5, resulting in a chi-square test being inappropriate (Gerritsen, 2014). Since a Likelihood ratio test ($L\chi^2$) is more robust, when the expected frequency assumption is not met, it was used instead (Field, 2009). The results of this test indicated that the two groups were significantly different on marital status ($L\chi^2$ (3, N = 112) = 13.93, $p < .05$), indicating that offenders were 4.5 times more likely to be married than non-offenders. An independent t-test was conducted to test for a difference between the mean ages of the two groups. The results indicated that there was a significant difference in

the means, t (106) = 5.07, $p < .01$, with the offenders (M = 29.23, SD, = 10.62) being older than the non-offenders (M = 21.44, SD = 4.92). Using these tests, it was clear the offenders were significantly older than the non-offenders, less educated, and more likely to be married. It was thus decided to control for age, marital status, and level of education in the main analyses.

Table 2

Comparison of offender and non-offender demographic information

	Non-offender	Offender
Sex		
Male	58.7% (*n* = 37)	63.3% (*n* = 31)
Female	41.3% (*n* = 26)	36.7 % (*n* = 18)
Race		
White	34.9% (*n* = 22)	24.5% (*n* = 12)
Black	31.7% (*n* = 20)	34.7% (*n* = 17)
Coloured	23.8% (*n* = 15)	34.7% (*n* = 17)
Indian/Asian/Other	9.5% (*n* = 6)	6.1% (*n* = 3)
Marital Status		
Single	90.5% (*n* = 57)	73.5% (*n* = 36)
Married	3.2% (*n* = 2)	18.4% (*n* = 9)
Divorced	0.0% (*n* = 0)	6.1% (*n* = 3)
Other	6.3% (*n* = 4)	2.0% (*n* = 1)
Household Income[a]		
Low	30.2 % (*n* = 19)	40.8 % (*n* = 20)
Middle - High	69.8 % (*n* = 44)	51.0 % (*n* = 25)
Highest Level of Education		
Grade 0-Grade 11	0.0% (*n* = 0)	34.7% (*n* = 17)
Grade 12	57.2% (*n* = 36)	34.7% (*n* = 17)
College or University	42.9 % (*n* = 27)	26.5% (*n* = 13)

Note. [a]Household income was measured using two different measurements: the community sample was asked if they were receiving financial aid from UCT, whilst the offenders were asked what grouping their household income fell into.

Table 3 details the statistics captured regarding types of offences committed by this study's offending sample. From this data, it is clear that Assault, Driving under the Influence, Possession of Illegal Substances, and Theft are the main crimes that were committed by the offending sample. Of the offenders, 22% did not specifically state what

offence they had committed, resulting in 11 cases of missing data for this field. As the participants had been recruited from a diversion program, which was required by the South African criminal justice system, one can assume that the overall risk of these offenders to society was considered low.

Table 3

Types of Offences Reported by Offending group

Types of Offences	Percentages (Frequencies)	*n*
Assault	10.2 %	5
Assault, Domestic Violence, Murder	2.0%	1
Driving under the influence	10.2%	5
Fraud	2.0%	1
Possession	22.4%	11
Possession and Assault	2.0%	1
Theft	24.5%	12
Missing data	22.4%	11
Total	100.0%	49

Taking into consideration the design of this study, the sample size was initially calculated using G*power. This was calculated for a hierarchical multiple regression analysis with a medium effect size set at .30, $\alpha = .05$ to protect against a type 1 error, and $\beta = .80$ to guard against type 2 error (Field, 2009). Lastly, it was calculated that there would be 15 predictor variables. This resulted in a minimum sample size of 80. The same information was inputted for a logistical regression, except that $R^2 = .20$, indicating a small association, and the odds ratio was set at 2.33. This resulted in a sample size of 65 being required. Since the largest sample size was 80 this was then set as the minimum number of participants to be recruited.

Following the collection of data and analysis, a retrospective power analysis was calculated for the two logistic regressions and the hierarchical multiple regression. A post-hoc power analysis for the first logistic regression, testing H2, where the Cox and Snell R^2 =

.37, $n = 107$, and $\alpha \leq 05$, produced a $\beta = .89$. The hierarchical multiple regression, which tested H3, using 7 predictors, $R^2 = .15$, $n = 106$, and $\alpha \leq .05$, resulted in the corresponding $\beta = .81$. Lastly, the logistic regression testing H4 produced a post hoc power of $\beta = .84$, when the Cox and Snell $R^2 = .28$, $n = 80$, and $\alpha \leq 05$. These tests indicated that there was sufficient to excellent power to run all the analyses.

2.3: Measures

2.3.1: Attachment

In the field of attachment research, it is widely debated whether or not interviews are better than self-report methods when measuring attachment. The *Adult Attachment Interview* is often referred to as the gold standard of assessing attachment (Bakerman-Kranenburg & IJzendoorn, 1993). Although a full discussion addressing this debate is beyond the scope of this dissertation, it is important to understand the basic premise behind each argument as they illustrate different conceptual understandings of what attachment is. Advocates for interview methods state that attachment is a dynamic process that can easily be altered and changed when defence mechanisms come into play. They therefore argue that the only real way to measure attachment is when one can work with these defences via an interpersonal interaction (Bartholomew & Moretti, 2002). Based on this, they claim that self-report measurements do not measure attachment, but rather are a means to explore the feelings and behaviours connected to attachment.

On the other hand, researchers advocating for self-report measures, like Shaver, Belsky and Brennan (2000), state that the ultimate end results are comparable, and those diagnostic self-report questions can bypass the defensive reactions that may occur during the interview process. Shaver et al. (2000) argue that self-report methods have similar reliability and validity to interview methods when measuring attachment. In addition, self-report methods are less time consuming, cheaper, and allow bigger sample sizes to be collected, without a

loss in validity, provided the right instrument has been selected (Holmes, 2001; Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010).

With this in mind, the "Experience in Close Relationships Revised" (ECR-R) questionnaire (Fraley et al., 2000), was chosen to measure attachment for this study. The ECR-R is a 36 item questionnaire based on a 7 point Likert-type scale, which was developed using item response theory on 323 items collected from previous attachment measures (Sibley & Liu, 2004). It measures attachment along two subscales, anxiety and avoidance. As exemplified earlier, in section 1.1: Outline of Attachment Theory, the orthogonal dimensions of attachment is seen as a preferred method of measuring this construct. Furthermore, the ECR-R was specifically designed to measure the anxiety and avoidance dimensions of adult attachment with varying ages, ranging from 20 to 60 years (Fraley, 2012), and within various domains (such as father, mother and intimate partner) (Shaver & Fraley, 1997).

Ravitz et al. (2010) indicates that this measure holds excellent evidence for convergent, discriminant, and predictive validity. Furthermore, Sibley and Liu (2004) reported Cronbach's alpha scores for the anxiety scale that range from $\alpha = .93$ to $\alpha = .95$ and scores ranging from $\alpha = .91$ to $\alpha = .93$ for the avoidance scale. These scores show excellent internal consistency reliability for this measure. The ECR-R has been used effectively in multiple cultural contexts, and with various forensic adult samples (McKillop et al., 2012).

In this study, each participant completed the ECR-R for their mother, father and current or most recent intimate partner separately. Cronbach's alpha was calculated on each of the subscales (anxiety and avoidance) for the different domains of attachment: mother, father and intimate partner. These results showed good internal consistency reliability for the anxiety scale, with the mother $\alpha = .89$, father $\alpha = .91$, and intimate partner $\alpha = .89$. Similarly, the

avoidance scales showed good reliability with the mother $\alpha = .94$, father $\alpha = .94$, and intimate partner $\alpha = .83$.

Each participant's responses on the two orthogonal dimensions of attachment (anxiety and avoidance) were summed for each domain of attachment separately, resulting in an anxiety and avoidance score for mother, father, and intimate partner. Following this, each participant was categorised as having either a secure or insecure attachment for each domain of attachment. This was calculated by using the median scores of the anxiety and avoidant attachment scales as a cut-off point as recommended by Fraley (2012). If both the avoidance and anxiety scores of a participant were below or equal to the median, they were classified as secure. Otherwise, they were classified as insecure. These cut-off points were as follows: mother anxiety 5.31, mother avoidance 4.76, father anxiety 5.28, father avoidance 4.17, intimate partner anxiety 4.28, and intimate partner avoidance 4.00. If the scale was entirely omitted, as per the instruction of the questionnaire, the participant was classified as not having that attachment figure (no father ($n = 17$) no mother ($n = 6$) or no intimate partner ($n = 12$)).

Following the calculation of individual domain scores for the two orthogonal dimensions of attachment, a global attachment-related anxiety and avoidance score was calculated for each participant (Fraley, Niedernthal, Marks, Brumbaugh, & Vicary, 2006). This was calculated, as recommended by Fraley, Hetterman, Vicary and Brumbaugh (2011), by using the average of the scale scores for the three domains of attachment. If the participant did not have ECR-R scores for all three domains of attachment, then the average score was calculated using only the completed measures. This provided the researcher with a global attachment score for both the anxiety and avoidance scale. Each participant was then further categorized as having either an insecure or secure global attachment, using the same principle described above. The median point for the global anxiety scale was 4.84, and 4.48

for the global avoidance scale. By the end of these calculations, each participant had individual ECR-R scores for anxiety and avoidance, for their mother, father, intimate partner and global attachment, as well as being categorized as holding either a secure or insecure attachment with the three domains of attachment measured and global attachment.

2.3.2: Antisocial behaviour

Individuals who have not been charged with or convicted of a crime may nevertheless engage in high levels of antisocial behaviour. Thus, the *Subtypes of Antisocial Behaviour* (STAB) questionnaire, developed by Burt and Donnellan (2009), was used to determine if offending and antisocial behaviour should be considered as equivalent or different variables. If offending and antisocial behaviour should be considered as different variables, inclusion of this measure helped to determine whether attachment is differentially related to offending and antisocial behaviour. According to Burt and Donnellan (2009), the STAB was developed in response to an increasing amount of research calling for measures to explore general antisocial behaviour, on a continuum, which accounts for a range of behaviour. This measure consists of 32 questions on a 5 point Likert-type scale, and measures three subtypes of antisocial behaviour: physical aggression (AGG), social aggression (SA), and rule breaking (RB). The sum of all the scale scores provides one with an overall antisocial behaviour score. In order to ensure that the STAB was relevant to the South African context, *dagga* was placed in brackets next to the word 'marijuana' as it is a more commonly understood term in South Africa. Since this is an open source measure, permission for such changes is not required.

Burt and Donnellan (2009) provide evidence that the STAB has sound factorial and criterion-related validity. Additionally, good to excellent reliability scores have been reported in two studies which used the STAB (Burt & Donnellan, 2009; Burt & Donnellan,

2010), with Cronbach alphas ranging from α = .84 to α = .91 for the AGG scale, α = .83 to α = .90 for the SA scale, and α = .71 to α = .87 for the RB scale.

In this current study all participants were required to complete the STAB. Cronbach alpha coefficients were calculated for each subscale (α = .86, α = .80, α = .87 for the AGG, RB and SA respectively) and for the entire scale (α = .92). These reliability results are comparable to what Burt and Donnellan (2009) found in their study, and indicate that the STAB had good reliability in the current context.

2.3.3: Social desirability

Since this study used self-report measures and focused on personal information, it was important that socially desirable responding (SDR) was controlled for (Mortel, 2008). Thus, Reynolds' (1982) short version of the *Marlow-Crowne Social Desirability Scale* was included. This is a well-established, popular, and widely-used means to measure SDR, requiring participants to state true or false to 13 items. After over 40 years of testing, this measure has consistently produced sound validity and reliability scores. Examples of such scores include internal consistency scores ranging from α = .62 to α = .76, a test-retest correlation of r = .74 and a correlation of r = .90 between the abridged and the long version (Andrew & Meyer, 2003).

In this current study, Cronbach alpha was .35, indicating poor internal consistency. Although the Kuder-Richardson formula has been recommended for reliability tests for dichotomous scales, this was only prior to the development of Cronbach alpha which essentially extends the Kuder-Richardson test (Cronbach, 1951). Following this, an independent t-test was conducted to establish if there were significant differences between the two groups of participants (offenders and the community sample). The means of the offender group (M = 7.54, SD = 2.57) and the non-offenders (M = 7.97, SD = 2.03) were not significantly different, t (110) = - 0.9.9, p > .05. Due to the similarity between the groups and

the poor reliability of this scale, as tested in this study, this scale was omitted from further analysis.

2.3.4: Demographic variables

Socioeconomic status (SES) of the offending sample was measured using items taken from the *Community Survey* designed by Statistics South Africa (2007). Although composite measures of SES are available, Diemers, Mistry, Wadsworth, Lopez, and Reimers (2013) advice against using such measures as this can reduce the extent to which one is able to identify the exact confounding variable influencing the outcomes. Therefore, SES was measured by assessing level of education, family/household income and employment status. Family/household income for the community sample was assessed according to whether the participant was receiving financial aid from UCT. The remaining demographic items for the community sample were the same as those for the offending sample.

According to the "Report on the identification of policing needs and priorities in the Western Cape" (Western Cape Government, 2013), Afrikaans is the most common language spoken (followed by English) in the Criminal Justice system in the Western Cape, the location of this study. This particular study's consent form and questionnaire was therefore translated into Afrikaans, ensuring that the majority of the sample approached would be able to participate. The process of translating these documents into Afrikaans was done via a translation, and back translation method, in order to guarantee that the English and the Afrikaans versions were as similar as possible (Babbie & Mouton, 2006). The initial translation was completed by a professional translator, whilst the back translation was completed by a bilingual peer of the researcher. Please see Appendices A and B for an English version of the consent form and questionnaire respectively and Appendices C and D for the Afrikaans versions.

2.3.5 Pilot Study

As these measures have not been used previously in a South African context with the population under question, a pilot study was conducted to assess the readability of the questionnaire. The specific aims of this was to ensure that the questionnaire was easy to understand, a reasonable length and not too repetitive. This was conducted with four participants, who were recruited from NICRO and met the inclusion criteria for the offender group. The Pilot study participants completed the questionnaire in English and engaged in a discussion with the researcher following the completed questionnaire. The results from this pilot study indicated that there were no problems with the questionnaire in terms of the three criteria mentioned above; as such no adjustments were made post completion of the pilot study and the completed questionnaires were included in the main analysis of the study.

In addition to testing the readability of the questionnaire, the pilot study helped the researcher to establish whether it would be possible to apply a snowball sampling method to recruit participants in order to achieve a matched community sample. Unfortunately, three out of the four participants in the pilot clearly indicated that they would not invite a friend to take part in the study, whilst the remaining participant was undecided. Due to this clear resistance, the researcher used an alternative method to recruit the community sample – see 2.2: Sample section on page 26.

2.4: Procedure

The majority of offender participants recruited from NICRO were involved in a diversion program, indicating their relatively low risk to society. Participants were invited to take part in the study, either when meeting up with their social worker at NICRO or when participating in the Adult Life-skill program (ALS). Participants then completed the questionnaire in a group setting following the completion of their time with the NICRO social worker at the NICRO premises where they were meeting (mostly the Cape Town branch).

Potential participants were informed about the study and then given the opportunity to ask questions before participating. Participants were informed that the questionnaire would take between 30-45 minutes and that, as an independent study, taking part would have no bearing on their particular court proceedings or what they were doing at NICRO. In addition to completing the questionnaire a signed informed consent form was required from all participants. All participants were given the option to complete the questionnaire in either English or Afrikaans. Forty-three participants chose to complete the questionnaire in English and six completed it in Afrikaans. Completed questionnaires were placed in an envelope and returned to the researcher, who remained present while the questionnaires were being completed.

The community participants, being recruited from UCT, all had access to the internet and a computer. The questionnaire was therefore made available and completed online using Google forms, with all the necessary information for informed consent included in the information sheet. This method allowed the maximum number of participants to take part, as it could be completed at a time and place most convenient for the participant. By checking a box next to statements, students were required to acknowledge the information presented to them and subsequently give their informed consent. Since UCT's medium of instruction is English, the online questionnaire and information was only available in English. In exchange for their participation students received 1 SRPP point for a course of their choosing.

2.5: Ethics

Ethical approval was gained from the UCT Department of Psychology Research Ethics Committee (see Appendix E) before the commencement of data collection. As the offending sample is considered vulnerable (having been found guilty of an offence), several ethical considerations were put in place to protect those who participated in this study. Consequently, all such participants were made aware that choosing to take part in the study or

not would have no bearing on their sentence or their time at NICRO, and no incentives were provided for their participation (Babbie & Mouton, 2006). In addition, all participants gave their informed consent to participate, either via checking statements on the online version or signing a consent form. Both options clearly provided participants with all the information about the study and informed them of their right to not participate and to withdraw (Matthew & Ross, 2010). Participation in this study was voluntary and confidentiality was ensured.

Should any discomfort arise from taking part in this study due to the personal nature of this questionnaire, all participants were provided with access to psychological support. Both NICRO and UCT participants were provided with the details of Lifeline. In addition to this, NICRO participants were encouraged to speak to their NICRO social worker, while UCT participants were guided to the Student Wellness Centre, where counselling is accessible. As a protective measure, all the data was collected anonymously and the questionnaire did not ask about criminal activity not already recorded by the South African Criminal Justice System. As such, any obligation on the part of the researchers to report criminal behaviour was avoided (Matthew & Ross, 2010). It is clear from the above mentioned protective methods and procedures used in this study, that any potential discomfort to participants was carefully considered in order to reduce any adverse effects, whilst still being able to answer the research question.

2.6: Data Analysis

Data was analysed using Version 23 of the IBM Statistical Package for the Social Sciences (SPSS). Descriptive statistics, specifically the mean and standard deviation, were calculated for the entire sample and then separately for the two groups. Following this, preliminary analyses were conducted to explore the data, before running the main statistical tests. Specifically, a series of independent t-tests was conducted with the STAB, all its subscales, and the two groups of participants (offending and the community sample). This

was done to establish if there was any significant difference between the offender and the community sample group on this measure.

The first hypothesis predicted that insecure attachments would have a higher occurrence in an offending sample than the community sample. A chi-square test of association was used to test this. This test used the global attachment security scale of each participant (as calculated in section 2.3.1: Attachment) as one variable, and offending status as the other. This enabled the researcher to assess if there was any relationship between global attachment security and offending status.

To test hypothesis two, that high avoidance would be positively related to offending, a preliminary analysis was conducted using both bivariate (Pearson) correlations and point biserial correlations. Bivariate correlations were conducted between all the continuous variables, specifically age, the ECR-R anxiety/avoidance scores for all domains and global attachment scales, and the STAB. A point biserial correlation was conducted between the continuous variables mentioned above and offending status. Following this, a hierarchical logistical regression was run using Age and Marital Status as control variables. The global ECR-R scores for avoidance and then anxiety were inputted as predictor variables with offending status as the outcome variable. Listwise deletion was used, where there was missing data, resulting in an adjusted sample size of $n = 107$.

Hypothesis three predicted that high avoidance would be positively related to antisocial behaviour. The bivariate correlations, mentioned above, were used to provide a preliminary test of this hypothesis. Subsequently, a hierarchical multiple regression, which controlled for Age, Marital Status, and Education Level, was conducted. The global ECR-R scores, first for avoidance and secondly for anxiety, was used as predictive variables, with the overall STAB score being set as the outcome variable. Listwise deletion was used, where there was missing data, resulting in an adjusted sample size $n = 106$.

In order to test hypothesis four, that an insecure maternal attachment would be more strongly linked to offending than a paternal or intimate partner attachment, a logistic regression was done to establish which domain of attachment security had the greatest influence on the offending status. In this analysis Age and Marital Status were controlled for. Each domain of attachment security was inputted: first the mother, father and then intimate partner, using offending status as the outcome variable. Listwise deletion was used, where there was missing data, resulting in an adjusted sample size $n = 80$.

Missing data was handled by using the 20% cut-off point (Briere, Godbout, & Runtz, 2012). This means that provided that 80% of the measure was completed, a participant's individual mean score was calculated for that scale and then entered into the missing data points (Woods & Riggs, 2008). This was completed for all the domains of attachment as measured on the ECR-R and the STAB. Missing demographic data was left out. As noted above, if an entire ECR-R measure was omitted, as per the instructions on the questionnaire, it was recorded that the participant did not have that specific domain of attachment. Therefore, no anxiety or avoidance scores for that domain of attachment were available for that participant.

Chapter 3: Results

3.1: Descriptive Statistics

Descriptive statistics were calculated for the entire sample and are presented in Table 4. An examination of Table 4 indicated that the mean global anxiety scores were marginally higher for the community sample compared to the offender sample. This was the opposite of what was found for the global avoidance scores, where the offender sample had a slightly higher mean than the community sample.

Table 4

Descriptive Statistics

	Entire Sample			Community Sample			Offender Sample		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Age	108	24.83	8.78	61	21.44	4.92	47	29.23	10.62
ECR-R Mother Anxiety	104	5.15	1.16	62	5.32	1.11	42	4.89	1.18
ECR-R Mother Avoidance	104	4.63	1.40	62	4.44	1.57	42	4.92	1.08
ECR-R Father Anxiety	94	5.12	1.30	63	5.25	1.39	31	4.85	1.09
ECR-R Father Avoidance	94	4.07	1.47	63	4.03	1.60	31	4.17	1.21
ECR-R IP Anxiety	99	4.25	1.26	56	4.18	1.31	43	4.33	0.95
ECR-R IP Avoidance	99	4.28	1.09	56	3.70	0.81	43	5.03	1.21
ECR-R Global Anxiety	111	4.82	1.09	63	5.00	1.08	48	4.61	1.07
ECR-R Global Avoidance	111	4.40	0.92	63	4.10	0.88	48	4.80	0.84
STAB Total	109	63.28	17.25	63	63.71	16.94	46	62.68	17.84

3.2: Preliminary Analyses

An independent t-test was conducted to test the difference in mean scores between the offender and community sample on the STAB to establish if there was a significant difference between the two groups on this measure of antisocial behaviour. There was no

significant difference in means between the two groups on their STAB scores, t (107) = -0.31, $p > .05$. The offender group, on average, reported similar STAB scores (M = 62.68, SD = 17.85) to the community sample (M = 63.71, SD = 16.94). Further t-tests were conducted to test the difference between the two groups on the different components of the STAB: physical aggression (AAG), social aggression (SA) and rule breaking (RB). Results of these analyses are presented in Table 5, which indicate that the offender and community sample were significantly different on the measure of SA and RB. Specifically, RB scores were significantly higher in the offender sample than in the community sample, and SA scores were significantly higher in the community sample compared to the offending sample. As shown in Table 5 the effect sizes for both these differences were exceptionally small. These findings indicate that offending and antisocial behaviour should be considered as different variables. Nevertheless, these results do indicate that offending is related to rule breaking, a subscale of the measurement of antisocial behaviour.

Table 5

Independent T-Test Results between Components of the STAB and Offending

	M	*SD*	*t*	df	*p-value**	*r*
Physical Aggression.			1.00	107	.32	.09
Offender	23.33	7.96				
Non-offender	21.87	7.13				
Social Aggression			-3.18	107	.00	.04
Offender	22.46	5.88				
Non-offender	27.00	4.95				
Rule Breaking			1.98	107	.05	.09
Offender	16.90	0.87				
Non-offender	14.84	0.62				

*Two-tailed

3.3: Insecure Attachment and Offending Status

A chi-square test was conducted to test the first hypothesis, which stated that an insecure attachment would occur more frequently in the offending group than in the

community sample. This test used the secure/insecure categorisation of global attachment scores for each participant. The results indicated that there was a significant difference in attachment security between offenders and non-offenders, χ^2 (1, N =111) = 6.40, $p < .01$. An examination of Table 6 indicates that offenders were more likely to have an insecure attachment in comparison with the community sample. This indicates support for the first hypothesis.

Table 6

Contingency Table of Global Attachment by Offending Status

	Offending	Non-Offending
Secure Attachment	9 (18.8%)	26 (41.3%)
Insecure Attachment	39 (81.3%)	37 (58.7%)

Note. Numbers in parentheses indicate column percentages.

3.4: High Attachment-Related Avoidance and Offending Status

Before testing hypothesis two, that high attachment-related avoidance would be positively related to offending, a preliminary series of bivariate and point biserial correlations were calculated. The bivariate correlations were done between all the continuous variables, specifically age, the ECR-R anxiety and avoidance scores for all domains and global attachment scales, and the STAB. A point biserial correlation was conducted between the continuous variables mentioned above and offending status. These correlations were calculated to establish if there was any relationship between the variables measured and if so, to measure the strength and direction of this relationship.

Table 7 provides a correlation matrix between all the variables. There are several significant correlations between variables, the highest correlation of which is $r = .87$, p (two tailed) < .01 between the global ECR-R anxiety score and father's ECR-R anxiety score. Such a high correlation is expected between these scores as the global attachment scores are

the average of the individual domain scores for each ECR-R measure. No other scores, however, are as highly correlated, indicating that multicollinearity is not a problem within this dataset.

Further examination of Table 7 indicates that age was significantly positively correlated with both intimate partner avoidance scores and offender status ($p < .01$). This result indicates that the older a person was, the more likely they were to be classified as an offender or have a high intimate partner attachment-related avoidance score. This series of correlations also indicates that the majority of the domains of attachment on both scales were significantly positively correlated with each other, indicating some connection between the scales and domains of attachment. Intimate partner avoidance was the only subscale that was not consistently significantly positively correlated with the other ECR-R scores. Instead there was a significant negative relationship between father anxiety and intimate partner avoidance scores.

Preliminary testing of hypothesis two, using the correlation matrix, found that high global attachment-related avoidance was significantly positively correlated with offending, with $r = .37$, $p < .01$. This provides preliminary support for hypothesis two. Further examination of the correlation matrix, indicated that high intimate partner attachment-related avoidance was strongly correlated to offending, $r = .61$, $p < .01$, whilst neither mother or father attachment-related avoidance was significantly related to offending.

Table 7

Correlation Matrix between Variables

	1	2	3	4	5	6	7	8	9	10
1. Age	-									
2. Mother Anxiety	-.12	-								
3. Mother Avoidance	-.03	.48**	-							
4. Father Anxiety	-.11	.62**	.26*	-						
5. Father Avoidance	-.04	.21*	.23*	.52**	-					
6. IP Anxiety	.07	.48**	.29**	.53**	.41**	-				
7. IP Avoidance	.35**	-.09	.18	-.23*	-.14	.23*	-			
8. Global Anxiety	-.10	0.84**	.40**	.87**	.45**	.82**	.36**	-		
9. Global Avoidance	.13	.32**	.76**	.37**	.68**	.45**	.54**	.36**	-	
10. STAB Total	-.06	-.16	-.17	-.38**	-.37**	-.33**	.00	.29**-	-.26**	-
11. Offender Status	.44**	-.19	.17	-.15	.05	.06	.61**	-.17	.37**	-.03

Note. IP – is abbreviation for Intimate Partner.
*Correlation is significant at the .05 level (two-tailed)
**Correlation is significant at the .01 level (two-tailed)

A binary logistic regression was used to further test this hypothesis. Before conducting this analysis, the data was explored to establish if it upheld all the assumptions. Initially the analysis was planned to control for age, marital status, and education level. These variables were all found to be significantly different between the two groups (see 2.2: Sample section). The offending group was the only group to have an education lower than Grade 12, due to sampling selection bias. As a result, the variable education could perfectly predict the outcome variable (offending status). Including this variable would subsequently lead to complete separation of the data set and the analysis could not be run (Field, 2009). To counter this, education level was excluded from this analysis. The design of the research ensured that the assumption of independence was upheld (Statistic Solutions, 2016), whilst the assumption of linearity was upheld for all the independent variables. As has already been explored, there was no multicollinearity in this data set.

With all the assumptions being met, a hierarchical logistic regression was run using offending status as the outcome variable. With age and marital status controlled for, global avoidance scores and global anxiety scores were inputted into the model respectively and run against offending status. It is clear from Table 8 that the predictive power of this model was improved when both the global avoidance and anxiety scores were included. An examination of the Wald statistics in the final model indicated that global avoidance scores, χ^2 (1) =15.60, $p < .001$ and global anxiety scores, χ^2 (1) = 7.53, $p < .01$, were both significant contributors to the model beside age χ^2 (1) = 10.51, $p < .01$, which was a control variable. These results indicated that someone with high attachment-related avoidance score was more likely to be an offender, whilst someone who had high attachment-related anxiety was less likely to be an offender. These result support the claim of hypothesis two that high attachment-related avoidance would be positively related to offending.

Table 8

Hierarchical Logistic Regression Analysis Predicting Offending Status

			95% C.I.	
Step	Variables	Odds Ratio	Lower	Upper
1	Age	1.18**	1.07	1.30
	Marital Status			
	Single vs. Married[a]	0.69	0.08	5.64
	Single vs. Other[b]	0.55	0.07	4.49
2	ECR-R Global Avoidance Score	2.29***	1.59	5.37
3	ECR-R Global Anxiety Score	0.42**	0.22	0.78

Note. a. Dummy coded variable 1 = married, 0 = not- married
b. Dummy coded variable 1 = other, 0 = not other
* p < .05,
** *p* < .01
*** p < .001

3.5: High Attachment-Related Avoidance and Antisocial Behaviour

Hypothesis three predicted that high attachment-related avoidance would be positively related to antisocial behaviour. Preliminary testing of this hypothesis, using the correlation matrix in Table 7, found that global attachment-related avoidance was negatively related to antisocial behaviour, $r = -.26$, $p < .01$. Further examination of Table 7 indicated that father attachment-related avoidance was significantly negatively correlated with antisocial behaviour. Neither mother nor intimate partner attachment-related avoidance was significantly correlated with antisocial behaviour. These findings provide no support for hypothesis three.

Following the preliminary analysis, prior to conducting a hierarchical multiple regression, the assumptions were explored. Since all the predictive variables were independent of each other, the assumption of singularity was met. As seen in Table 7, multicollinearity was not a concern. This was supported by the VIF and Tolerance scores; all VIF scores were below 10 and were close to 1, whilst the Tolerance scores were all above .2. An examination of the standardized residuals indicated that only three cases had a value over

2 and this is considered to be within an acceptable limit (Field, 2009). One case produced a value of 3.22 which resulted in a closer examination of the Cook's distance and the average leverage. As all these scores were in the acceptable range, and results indicated that no one case in particular was affecting the model adversely. Therefore, it was concluded that as the one high standardized residual value was not exerting a great influence on the model, the assumption of homoscedasticity was met. An examination of the scatterplots indicated that the assumptions of normality and linearity were satisfied. The Durbin-Watson score was 1.99, indicating that the assumption of independent error had been met.

A hierarchical multiple regression was thus conducted, controlling for age, education level and marital status, as indicated above. Following the same procedure carried out in the logistic regression analysis, global attachment-related avoidance and global attachment-related anxiety scores were inserted into the model in turn. An examination of the results displayed in Table 9 shows that the identified control variables only explained 5% of the variance in the model F (5) = 1.13, $p > .05$. When the global attachment-related avoidance scores were added, the amount of variance explained increased to 12%, F (1) = 7.22, $p < .01$. This was the only significant improvement in the model. Including the global anxiety scores only increased the explained variance to 15% in the model, which was not a significant contribution, F (1) =3.44, $p > .05$. An examination of the Beta coefficients indicated that the relationship between avoidance and antisocial behaviour was negative, meaning that attachment-related avoidance was associated with less reported antisocial behaviour. Because this relationship was in the opposite direction to that proposed by the hypothesis, hypothesis three was rejected.

Table 9

Hierarchical Multiple Regression Analysis Predicting Antisocial Behaviour

Step	Variable	ΔR^2	β	SE B
1		.05		
	Age		0.00	0.6
	Marital Status			
	Single vs. Married[a]		-0.15	7.11
	Single vs. Other[b]		0.05	7.03
	Education Level			
	Grade 12 vs. No Grade 12[c]		-0.00	5.73
	Grade 12 vs. Tertiary Education[d]		0.18	3.77
2	ECR-R Global Avoidance Score	0.06**	-0.27**	1.85
3	ECR-R Global Anxiety Score	0.03	-0.20	1.78

Note. a. Dummy coded variable 1 = married, 0 = not- married
b. Dummy coded variable 1 = other, 0 = not other
c. Dummy coded variable 1 = no Grade 12, 0 = Grade 12
d. Dummy coded variable 1 = Tertiary Education, 0 = no Tertiary Education
* Significant, $p < .05$,
** Significant, $p < .01$

3.6: Insecure Maternal Attachment and Offending Status

Hypothesis four predicted that an insecure maternal attachment would be more strongly associated with offending status than paternal or intimate partner attachment. A logistic regression was conducted between the different domains of attachment and offending status, whilst controlling for age and marital status. As exemplified in the discussion above, the assumptions for logistic regression were upheld in this data set. An examination of Table 10 shows that there was no increase in predictive power when including the security of attachment within each domain, specifically, for mother, χ^2 (1) = 2.15, $p > .05$, for father, χ^2 (1) = 0.06, $p > .05$ and for intimate partner, χ^2 (1) = 3.26, p > .05. These results indicate that hypothesis four can be rejected.

Table 10

Hierarchical Logistic Regression Analysis, Domains of Attachment predicting Offending Status

			95% C.I.	
Step	Variables	Odds Ratio	Lower	Upper
1	Age	1.14**	1.04	1.26
	Marital Status			
	Single vs. Married[a]	1.27	1.16	10.35
	Single vs. Other[b]	0.84	0.1	7.41
2	Mother Attachment			
	Insecure vs Secure	0.03	0.00	1.37
3	Father Attachment			
	Insecure vs Secure	1.2	0.21	6.83
4	Intimate Partner Attachment			
	Insecure vs Secure	0.21	0.04	1.14

Note. a. Dummy coded variable 1 = married, 0 = not- married
b. Dummy coded variable 1 = other, 0 = not other
** Significant, $p < .01$

Chapter 4: Discussion

The current study aimed to explore the link between attachment and offending in a South African context. Based on the literature it was hypothesised that an insecure attachment would occur more frequently in offenders than non-offenders and the results of this dissertation support hypothesis one. It was further predicted that high attachment-related avoidance would be positively related to offending; and again this was supported by the results. Hypothesis three predicted that high attachment-related avoidance would be positively related to antisocial behaviour, which was rejected, after an examination of the results. Lastly it was hypothesised that an insecure maternal attachment would be more strongly associated with offending than an insecure attachment to fathers or intimate partners. The results showed that there was no support for hypothesis four and subsequently it was rejected. These results are discussed in more detail below.

4.1: Insecure Attachment and Offending

The current study found that an insecure attachment was more likely to occur in an offending sample compared to the community sample. Although ample international research has demonstrated a link between insecure attachment and offending (Hoeve et al., 2007; Jonason et al., 2013; McKillop, et al., 2012; Smallbone & Dadds, 1998), limited research has investigated this link with a low-risk offending sample (i.e. offenders undergoing alternative sentences) (Buttell, et al., 2005). Thus the current study has effectively contributed to the field of research, because it has indicated that low-risk offenders are similar to incarcerated offenders in having an increased representation of insecure attachments.

This result not only corroborates and extends international research, but it also empirically tested these findings in a South African context. It therefore offers quantitative support for the qualitative findings of Gould (2015) and Matthew et al. (2011). Both these

South African studies found that incarcerated offenders reported characteristics of insecure attachments, yet neither specifically measured attachment. The coupling of previous research with these current and significant results emphasizes the importance of considering the connection between insecure attachments and offending in South Africa.

Despite the strength of this finding, it is important to note that not all offenders had an insecure attachment, as 19% of offenders reported a secure attachment. Conversely, not all community sample participants had a secure attachment, with less than half (41%) reporting a secure attachment. These findings seem to mirror what numerous researchers have found, that an insecure attachment is not a determinant for offending and that other extraneous variable contribute to the development of offending (Austin, 2011; Hoeve et al., 2007; Ross & Pfafflin, 2007; van IJzendoorn & Feldbrugge, 1997). For example, in this study several participants indicated that they did not have a specific domain of attachment: no father (n = 17), no mother (n = 6), or no intimate partner (n = 12). Since Henry, Caspi, Moffitt and Silva (1996) found a significant link between absent parents and offending, this could be one of the extraneous variables that could be impacting on this study's results. The results therefore, identify parental absence as a potential variable to consider in future research.

Whilst understanding that a relationship exists between insecure attachment and offending is helpful, it holds a limited use in the application of theory. This is because the term 'insecure attachment' covers a broad range of behaviours. In light of this, the current study further explored the relationship between orthogonal dimensions of attachment and offending within a South African context.

4.2: High Attachment-Related Avoidance and Offending

The analyses testing hypothesis two provided support for the current study's prediction that high attachment-related avoidance would be positively linked to offending. Essentially, a person with high attachment-related avoidance was more likely to have offended. This

result supports two previous studies (Goldstein and Higgins-D'Alessandro, 2001; Hansen et al., 2011) which found a connection between high attachment-related avoidance and offending in an incarcerated sample in the USA and Norway respectively. Therefore, this result not only corroborates previous research on this topic, but extends it to a low risk offending sample in South Africa.

Whilst the current study identifies the applicability of attachment theory and research to a low risk sample, the extent to which these results are a product of the South African context or represent low risk offenders in general is unknown. This is particularly pertinent as no other known studies have used the orthogonal dimensions of attachment in the context of low risk offenders, making it difficult to disentangle the role these two factors play on the results. As touched on earlier, South Africa has a high rate of violent crime and an overburdened criminal justice system in prosecuting cases (Lancaster, 2012). It is therefore unknown if South Africa has a higher threshold for which crimes are considered deserving of incarceration, subsequently placing more offenders in a low risk category. If this is true, then the extent to which the current sample represents low-risk offenders internationally may be limited. Alternatively, considering the South African context may also account for the similarities that the current study has found with international incarcerated offender samples. Although it is not within the scope of this study to determine how internationally applicable the relationship between high attachment-related avoidance and low-risk offending may be, it is a strong point of departure for future research.

Despite the contribution this finding makes to the literature, specifically in relation to high attachment-related avoidance and offending, some association has previously been found between high attachment-related anxiety and offending. Examination of the results indicates that high attachment-related anxiety was significantly and negatively associated with offending. This indicates that the more attachment-related anxiety a person had, the less

likely they were to be an offender. Within the context of attachment theory, people who are high in attachment-related anxiety feel an intense desire for intimacy and a persistent fear of rejection (Barbaro & Shackelford, 2016). Barbaro and Shackelford (2016) finding contradicts Ogilvie et al.'s (2014) study that found that attachment-related anxiety was positively and significantly associated with offending. Although a full discussion of this result is beyond the scope of the current study, it does provide preliminary support for high attachment-related anxiety to potentially be a protective factor against offending. Two studies (Frick & White, 2008; Tremblay et al., 1997) have found that high anxiety tends to reduce the extent to which a person engages in antisocial behaviour, which supports the current finding. It is proposed that participants high in attachment-related anxiety may feel an increased need to please others and look after their interpersonal relationships, making it harder to do anything, such as offending, that may place this in jeopardy. Future researchers should explore this hypothesis further, testing its relevance and applicability.

The results discussed in this subsection essentially highlight some of the complexity in attachment research, as there are relatively few studies that have used orthogonal dimensions with which to compare and contrast these results. Crittenden, Claussen, and Kozlowska (2007) in their study, found that the instruments used to measure attachment have a direct influence on the results obtained. As demonstrated in the literature review section of this dissertation, studies using different means to measure attachment (categorical versus dimensions) cannot always be contrasted or compared to each other. For example, a study that uses categorical measures of attachment may find a link between a fearful attachment and offending. Since a fearful attachment is comprised of both high attachment-related anxiety and avoidance, and a distinction is not made between them, comparing this to a study that uses the two dimensions of attachment is inappropriate. These differences in measurement tools make interpreting or generalising results difficult. It is therefore,

recommended that more researchers use the orthogonal dimensions of attachment in order to offset this challenge.

Despite these challenges, the results of the current research provide a foundation on which future research can be built. Furthermore, it is of value to South African professionals to be able to understand that there is a significant positive association between high attachment-related avoidance and offending.

4.3: High Attachment-Related Avoidance and Antisocial Behaviour

Although the results of this study indicated that attachment-related avoidance was related to antisocial behaviour, the relationship was in the opposite direction to that hypothesised. Low attachment-related avoidance was linked to antisocial behaviour. This result not only contradicts the statistical results that supported hypothesis two, but also the majority of international research outlined in the literature review section of this dissertation.

High attachment-related avoidance is characterised by people who "tend to avoid emotional closeness and intimacy, do not feel comfortable opening up, or depending on their partner, and are reluctant to ask their partner for comfort, advice or help" (Illicento et al., 2012, p. 25). Therefore, a person who is low in attachment-related avoidance is someone who is happy to seek out a relationship for comfort. In light of this, linking low avoidance to antisocial behaviour seems contradictory, as antisocial behaviour would seem to interfere with this underlying attachment behaviour. Despite this contradiction there are three potential explanations for this result: the age difference between the samples, the difference between the two groups on the subtypes of antisocial behaviour measured in this study, and that previous studies have used different methods to measure antisocial behaviour. Each of these explanations will be explored below.

To address the first explanation, that the two groups differed significantly in age, Moffitt's (1993) theory of antisocial behaviour will be applied. According to Moffitt's (1993)

theory, there are two groups of people who engage in antisocial behaviour, namely adolescent-limited and life-time persistent. One of the key characteristics of adolescent-limited antisocial behaviour is that adolescents engage in such behaviour to fit in and feel part of a group, thus emphasising the importance of the peer group. Therefore, adolescents who are low in avoidance and desire peer-group acceptance and closeness may be more likely to engage in adolescent-limited antisocial behaviour than those who are more solitary, reserved, and self-reliant. This explanation would be supported by the fact that the majority of this sample was made up of University students in their late teens or early twenties. This age group is characterized by Moffitt (1993) as being in the end phase of adolescent-limited antisocial behaviour. Contrastingly, the mean age of the offender group was 29.23, which is significantly older than the community sample and thus may show more characteristics of life-time persistent antisocial behaviour. Therefore, this result may reflect the different types of antisocial behaviour engaged in by the two groups.

Despite the above explanation, it does not address why this result contradicts the findings for hypothesis two. To explore this, the use of the STAB and the subtypes of antisocial behaviour that it measures, will be explored. An examination of the preliminary analysis indicated that there was no significant difference between the two groups (offenders and the community sample) on the measure of antisocial behaviour. The similarities of these two groups indicate that the STAB is not an equivalent measure, when compared to offending status. Further exploration of the preliminary analysis indicated that the offender group was more likely to have a higher score in Rule Breaking (RB), compared to the community sample. In contrast, the community sample had higher scores on Social Aggression (SA) than the offending group, indicating that the majority of antisocial behaviour displayed by this group was SA. This is similar to the findings of Burt and Donnellan (2009), who found that college students reported more social aggression than an older community sample of

adults, despite being matched on other variables. This finding indicates that social aggression and rule breaking/offending may have different risk factors and as such may be related to attachment in different ways.

Despite these explanations, the findings for hypothesis three, still contradicts the majority of literature in this field. At this point it becomes important to acknowledge the different methods that previous studies have used to measure antisocial behaviour. Previous studies that found a connection between offending and antisocial behaviour have used different measures of antisocial behaviour, which have equated antisocial behaviour to criminal acts (Bendixen & Olweus, 1999; Farrington, 1997). Such measures do not consider the nuanced behavioural elements involved in antisocial behaviour, something that the STAB has specifically been designed for (Burt & Donnellan, 2009). These differences highlight a conceptual difference between the older methods of measuring antisocial behaviour and the STAB. Such differences in the measurement of the construct antisocial behaviour make it difficult to compare and contrast results from studies that use the different measurement methods. This highlights the importance of clearly operationally defining a construct such as antisocial behaviour, to ensure that the results of studies can be accurately placed in the context of the literature. Such operational definitions influence what is measured, in terms of both predictive and outcome variables, and subsequently impact the results of the study. In order to investigate the relationship between attachment and antisocial behaviour in more detail, future research should use the STAB with a variety of samples.

Although the results lead to the rejection of hypothesis three, it highlights several key theoretical issues. First, that the STAB and offending (as measured in this study) are not equivalent measures. Second, using a nuanced method to measure antisocial behaviour provides one with richer detail into the subtypes of antisocial behaviour and how these present in different sample groups. Lastly it highlights the challenges of comparing the

results of studies that have operationalised the same construct differently. Consequently, researchers are encouraged to consider these points before embarking on new research in the attachment and antisocial field.

4.4: Insecure Maternal Attachment and Offending

The results of the test used for exploring hypothesis four, that an insecure maternal attachment would be more strongly associated with offending than paternal or intimate partner attachment, provided no support for this hypothesis. The results indicate that for a low-risk offending group, insecure maternal attachment was not significantly associated with offending. They also indicate that no other domain of attachment was significantly independently associated with offending. Such a conclusive rejection of hypothesis four by the current results would appear to suggest that, despite researchers calling for the importance of considering the domains of attachment when applying attachment theory in research (Bogaerts, et al., 2005; Jonason et al., 2013; McKillip, et al., 2012), such a distinction is not necessary.

As demonstrated in the literature review of this study, there is limited empirical data that has previously explored this predicted association. The studies that do focus on specific domains of attachment and offending have tended to focus on sexual offending (Bakermans-Kranenburg & van IJzendoorn, 2009; Bogaerts, et al., 2005; Fearon et al., 2010), or externalising behaviour (Marshall, et al., 2000; Smallbone & Dadds, 1998; Mckillop et al., 2012) as the outcome variable. This is different to the low-risk offending that was measured in the current study, which may explain the non-convergence of these results.

Despite the unexpected nature of these results, they do support Bowlby's initial theory that as a person gets older their attachment behaviour becomes more the property of the individual than the person they are attaching to (Daniel, 2006). This is represented in the development of the IWM, which was discussed in the literature review. Similarly, Van

IJzendoorn, Sagi and Lambermon (1992) found evidence to support the notion of an integrated model of attachment. Essentially, such a model proposes that the combined network of attachment figures (mother, father, etc.) is more predictive of later socio-emotional functioning, compared to each individual domain of attachment. The results from the current study provide empirical support for an integrated model of attachment within the offending framework.

Thus it can be concluded from these results that, within a South African context, no individual domain of attachment has a unique association with low risk offending. This finding, based within the context of the results from hypotheses one and two, provides support for the application of the network theory of attachment (van Ijzendoorn et al., 1992) to offenders in the South African context. Individually, each domain of attachment had no association with offending, yet when using the global attachment scales (a network theory of attachment), insecure attachment and attachment-related avoidance was associated with offending. This highlights the importance for future research to use the network theory of attachment when investigating offending with high-risk offenders, to establish if these finding are specific to a low-risk offending context.

4.5: Limitations and Directions for Future Research

Despite the contribution this study makes to the international and local academic literature, there are several limitations that need to be considered. First, it is important to note that this study used a cross-sectional research design. This means that drawing conclusions about any causal links between predictor and outcome variables is inappropriate. It is therefore recommended that future research designed to understand the causal link between attachment and offending use a longitudinal method.

Another limitation is that this study used self-report data collection techniques. Self-report methods have several inherent problems as it relies on the honesty, introspective

ability, and understanding of the participant (Hoskin, 2012). Furthermore, a self-report Likert-type rating scale relying on a subjective assessment of information, results in differences in perception and understanding from participants (Matthew & Ross, 2010). This limitation can be partially managed when the questionnaire is completed in the presence of the researcher since participants can ask questions. As the researcher had to rely upon the community sample completing the questionnaire online, not all participants in the current study were able to seek clarification. In future, researchers wanting to overcome this limitation can get participants to complete the questionnaires in their presence as well as getting collateral information from multiple sources.

As indicated earlier, participants responding in a socially desirable way are another potential consequence of self-report data collection. An attempt to control for socially desirable responding was made, but the measure used (the short version of the *Marlowe Crowne Scale of Social Desirability*) had poor reliability in this sample, resulting in the inability to use the data obtained from this scale in further analysis. Although Johnson and Van de Vijver (2003) found evidence to support the cross-cultural generalisability of the *Marlowe Crowne Scale of Social Desirability* scale, Ray (1984) identified that some populations did not produce sufficient reliability on the short version of this scale, resulting in the scale being unusable. When assessing this particular South African group, it is recommended that future research make use of the long version of this scale, as the results of this study indicate that the short version does not have sufficient reliability within this sample.

Furthermore, it needs to be acknowledged that the current sample was made up of participants who volunteered, and also those that had been accepted into the NICRO diversion programs. In order to be accepted into the diversion program, participants have to acknowledge their guilt and express remorse for their offending behaviour, and such actions

are not typical of a general offending population. There were also relatively few participants who opted to complete the questionnaire in Afrikaans (n = 6). As indicated in the procedure section, Afrikaans is predominantly spoken by those involved in the Western Cape criminal justice system (Western Province Government, 2013), indicating another variable on which this offender sample may be different from the general offender population. The extent, to which the language discrepancy is a characteristic of low risk offenders or the location of the NICRO branches where research was conducted, is unknown. Nonetheless, both these points indicate potential for the offender group not to be classified as typical offenders. The University students who volunteered may also have specific characteristics that are not representative of the general South African community, such as their relatively high level of education.

It is also important to note that these results are located in the South African context. As a result, caution should be applied when generalising these results beyond the population that was under study, a South African low-risk offending group. It would be a valuable addition to the international and local academic literature for future research to be conducted with different risk-level offenders in a variety of cultural contexts, identifying similarities and differences between these groups.

Lastly, despite the strong psychometric properties of the ECR-R, it must be noted that Fraley et al. (2000) reported that it tends to measure insecure attachment better than secure attachment. Due to the ample literature documenting the connection between insecure attachment and offending, this was not anticipated to be a problem. Nevertheless, it is recommended that future research using different measures of attachment should bear this in mind when comparing and contrasting results.

4.6: Implications of findings

Since the development of attachment theory by Bowlby in 1969, there has been extensive research in the field leading to considerable advancements in understanding the role that attachment plays in an individual's development. As has been demonstrated in this paper, the current study further builds upon this theoretical foundation, finding an association between attachment and offending. The use of diverted offenders in a different socio-political context, has contributed to international research. The support for hypotheses one and two, that both an insecure attachment and high attachment-related avoidance are associated with offending, corroborate the findings of international literature. These results indicate that the association of attachment theory with offending is highly applicable within the South African context. Such a positive result provides tentative groundwork for the assumption that other related theories, such as The Integrated Theory of Sexual Offending (Marshall & Barbaree, 1990) or Dutton's Theory of Intimate Partner Violence (Dutton & White, 2012), may also be applied to the South African context. However, more research is needed to test the application of these theories, as it is beyond the scope of this paper to investigate them further.

The current study also shows that although attachment is an important factor in understanding offending, it is not the only variable at play. Although it was not within the scope of this dissertation to address the multifaceted risk factors at play in the development of offending behaviour, the results do highlight the need for this to be considered. Specifically, only 15% of the variance explaining antisocial behaviour was accounted for in this study, leaving 85% of the variance unexplained. Similarly, only 81% of offenders reported having an insecure global attachment, leaving 19% of offenders who reported having a secure attachment. This is also one of the key criticisms of Bowlby's (1944) study entitled "*Forty-four juvenile thieves: Their character and home life*", which ignored extraneous variables that

impact on the development of offending (McLeod, 2007). The combined findings of this dissertation and Bowlby's (1944) results, indicate that factors other than attachment also contribute to the development of offending/antisocial behaviour, and this supports the risk and protective factor model of understanding these behaviours (van IJzendoorn, 1997).

4.7: Clinical Implications

In light of South Africa's high crime rates, this study offers an understanding of offending behaviour through the lens of attachment theory. Although it is clear that this study is not without its limitations, it does provide an understanding to clinicians as to the higher proportion of individuals who experience high attachment-related avoidance within the offending population. As Scott (2003) and Clayton (2010) point out, understanding how a person forms relationships can inform strategies for clinicians to engage with him/her. Working with a client who has high attachment-related avoidance is extremely difficult, as their foundational attachment style is one that disregards the need for relationships and closeness, the very essence of therapy. Consequently, the therapist is required to put in greater time and effort, to build rapport and a safe environment for the client to open up (Timmerman & Emmelkamp, 2006). As therapy for such clients is often perceived to be "unravelling" (Sinhan & Sharan, 2007), Wallin recommends, in his 2007 book on *'Attachment and Psychotherapy'*, that the therapist should focus on affect, whilst carefully balancing empathy and confrontation.

It is significant to note, however, that in South Africa's current socio-political climate, - one with "multiple interlocking forms of structural violence – including poverty, inequality, unemployment, racism, and sexism" (Long, 2016, para 21), guidelines for individual psychotherapy have limited utility. This is due to the exceptionally limited capacity that is available to treat individual clients, which according to Long (2016) only 25% of the population diagnosed with mental illness have access to appropriate treatment. Even though

the courts use diversion programs, these are mostly run by Non-Governmental Organisations (NGOs) who struggle to get appropriate and consistent funding. This often leaves NGO's short staffed, working above capacity levels, and under difficult structural frameworks (Stuart, 2013). Due to this, such programs tend to rely on group therapeutic interventions. Although attachment theory has been effectively applied to working with Intimate Partner Violence (Lawson & Brossart, 2009) and in group therapy settings (Markin & Marmarosh, 2010), there has been limited research as to whether therapy in a group setting is appropriate or effective for offenders with high attachment-related avoidance. In light of these difficulties identified, future research is required to develop and test culturally relevant interventions, specifically for group diversion programs.

The high crime rates, scarce resources available, and the link between attachment and offending in South Africa, highlight the importance of early preventative intervention. A proactive approach, as documented by Lawson (2008) and numerous other researchers, is an effective way to break the cycle of crime. Early interventions, as stipulated in the Early Development Policy of South Africa (Department of Social Development, 2015), can focus on guiding a positive parent-child relationship by introducing parenting skill programs and reflexive parenting practices. Alternatively, interventions can focus on providing children and adolescents with alternative experiences of attachment. Regardless of which strategy of intervention is decided upon, this research underlines the need to consider the contextual implications of a client's attachment model and to adjust one's methods to work with it in a constructive manner (Manford, 2014; van IJzendoorn, 1997).

4.8: Conclusion

Currently, South Africa has one of the highest crime rates in the world. Despite this looming crisis, limited research has been conducted to understand the pathways that lead a person to engage in criminal activity, within the South African socio-political context.

Drawing on international research and theories, which have consistently found a link between early experiences in the family home and offending, attachment theory is seen as a key point of departure in understanding criminal behaviour. As such, many studies have documented a link between insecure attachment and offending. Yet, despite the international research, limited research has investigated attachment with an adult offending sample in South Africa. The current study, therefore, aimed to fill this gap in the literature.

It was subsequently found that an insecure attachment occurred more frequently in an offender sample than in the community sample, and that high attachment-related avoidance was positively associated with offending. Contrastingly, the results found no support for the hypothesis that high attachment-related avoidance would be related to antisocial behaviour, or that the security of attachment to the mother would be most strongly associated with offending. These findings provide support for the application of an integrated model of adult attachment to offending in the South African socio-political context. Furthermore, this study also highlighted some of the challenges in measuring both attachment and antisocial behaviour, specifically, the limited ability to compare and contrast different measurement tools. It is therefore recommended that multiple attachment tools are used in research, as well as clearly defining the outcome variable, be it offender, antisocial behaviour, or externalising behaviour.

Understanding the relevance of attachment theory to offenders in the South African context provides insight into the development of clinical interventions to be conducted with this population. Despite this, the international literature has found that offending develops out of a multifaceted interaction of various risk and protective factors. Therefore, although an insecure attachment or high attachment-related avoidance occurs more frequently in an offending sample, it does not conclusively predict that such an attachment will result in

offending behaviour. Future research, using attachment as a key variable, should therefore include other extraneous variables to develop a more comprehensive model of offending.

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Appendix A: Consent Form

University of Cape Town
Department of Psychology:
Consent Form

1. **Invitation and Purpose**

You are invited to take part in a research study about how relationships influence behaviour. I am a Master's student from the Department of Psychology at the University of Cape Town.

2. **Procedures**

If you decide to take part in this study, we will ask you to fill in a questionnaire. The questions will be about your relationships, and about the way you act. The questionnaire will take between 30-45 minutes and you may skip any question you do not wish to answer.

3. **Will this study hurt you or make you feel bad?**

This study will not hurt you. It may cause you to feel uncomfortable, because it asks you questions about your relationships. For example, we ask about your relationship with your mother, father and romantic partner, as well as about some of the ways in which you act. If after the study you still feel upset, we recommend that you contact LifeLine, a 24-hour free counselling service, on 082 231 0805, or speak to your social worker if you are currently working with NICRO.

4. **Benefits**

There are no obvious benefits to you, if you take part in this study. The knowledge we will gain from it, however, may be used to help improve treatment programs, as well as to develop crime prevention programs.

5. **Do I have to participate?**

You do not have to participate in this study—it is up to you. Choosing not to participate will not affect your relationship with NICRO or your sentence. You can say okay now and change your mind later. All you have to do is tell us you want to stop.

6. **Who will know that you have taken part in this study?**

We will not tell anyone that you have taken part in this study. All of your personal information will be kept confidential (private) so that no-one will know that it is yours.

7. **Questions**

If you have questions about the research, please contact Megan Barber on

BRBMEG001@myuct.ac.za or her supervisor, Lauren Wild, on lauren.wild@uct.ac.za or (021) 650 4607.

If you have questions about your rights as a participant, or concerns or complaints about the research, please contact Rosalind Adams, in the Department of Psychology at the University of Cape Town on Rosalind.adams@uct.ac.za, or (021) 650 3417.

11. **Signatures**

I have been told about this study, why it is happening and what will happen. All potential risks have been described above. I have been given time to ask any questions and these questions have been answered to the best of the investigator's ability. I have a copy of this consent form.

Investigator's Signature Date

Subject's Signature Date

Appendix B: Questionnaire

Section A

Please complete all the questions as best as you can.

1. What is your age in years?

Please circle the most appropriate answer

2. How would you classify yourself?

Male	Female

3. How would you classify yourself?

White	Black	Coloured	Indian/Asian/Other

4. What is your marital status?

Single	Married	Divorced	Other

5. What is your highest level of education achieved?

Grade 0-11	Grade 12	College/ University

6. What is your family/household monthly income, before tax?

R 0 - R 4 500	R 4 501 to R 52 000	above R52 000

7. What is your current employment status

Unemployed	Employed	Other (e.g. Student, pensioner)

8. Have you ever been found guilty of a criminal offence and sentenced or sent to a

diversion programme?

Yes	No

8 a). If yes please specify what the charge was.

Section B

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Please answer the following questions about your mother or a mother-like figure. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement. If you did not have a mother or a mother-like figure please move on to the next section.

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
1) I'm afraid that I will lose my mother's love	1	2	3	4	5	6	7
2) My mother really understands me and my needs.	1	2	3	4	5	6	7
3) I often worry that my mother will not want to stay with me.	1	2	3	4	5	6	7
4) It's easy for me to be affectionate with my mother.	1	2	3	4	5	6	7
5) I often worry that my mother doesn't really love me.	1	2	3	4	5	6	7
6) I find it easy to depend on my mother.	1	2	3	4	5	6	7
7) I worry that my mother won't care about me as much as I care about her.	1	2	3	4	5	6	7
8) I feel comfortable depending on my mother.	1	2	3	4	5	6	7
9) I often wish that my mother's feelings for me were as strong as my feelings for her.	1	2	3	4	5	6	7
10) I am nervous when my mother gets too close to me.	1	2	3	4	5	6	7
11) I worry a lot about my relationships.	1	2	3	4	5	6	7
12) I talk things over with my mother.	1	2	3	4	5	6	7
13) When my mother is out of sight, I worry that she might become interested in someone else, as her child.	1	2	3	4	5	6	7

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
14) I tell my mother just about everything.	1	2	3	4	5	6	7
15) When I show my feelings for my mother, I'm afraid she will not feel the same about me.	1	2	3	4	5	6	7
16) It helps to turn to my mother in times of need.	1	2	3	4	5	6	7
17) I rarely worry about my mother leaving me.	1	2	3	4	5	6	7
18) I usually discuss my problems and concerns with my mother.	1	2	3	4	5	6	7
19) My mother makes me doubt myself.	1	2	3	4	5	6	7
20) It's not difficult for me to get close to my mother.	1	2	3	4	5	6	7
21) I do not often worry about being abandoned.	1	2	3	4	5	6	7
22) I find it relatively easy to get close to my mother.	1	2	3	4	5	6	7
23) I find that my mother doesn’t want to get as close as I would like.	1	2	3	4	5	6	7
24) I get uncomfortable when my mother wants to be very close.	1	2	3	4	5	6	7
25) Sometimes my mother changes her feelings about me for no apparent reason.	1	2	3	4	5	6	7
26) I prefer not to be too close to my mother.	1	2	3	4	5	6	7
27) My desire to be very close sometimes scares people away.	1	2	3	4	5	6	7
28) I don't feel comfortable opening up to my mother.	1	2	3	4	5	6	7
29) I'm afraid that once my mother gets to know me, she won't like who I really am.	1	2	3	4	5	6	7
30) I am very comfortable being close to my mother.	1	2	3	4	5	6	7

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
31) It makes me mad that I don't get the affection and support I need from my mother.	1	2	3	4	5	6	7
32) I find it difficult to allow myself to depend on my mother.	1	2	3	4	5	6	7
33) I worry that I won't measure up to other people.	1	2	3	4	5	6	7
34) I feel comfortable sharing my private thoughts and feelings with my mother.	1	2	3	4	5	6	7
35) My mother only seems to notice me when I’m angry.	1	2	3	4	5	6	7
36) I prefer not to show my mother how I feel deep down.	1	2	3	4	5	6	7

Section C

The following set of statements asking about your general behaviour, please circle the number that most applies to you, from 1 never to 5 always.

	1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
1) Felt like hitting people	1	2	3	4	5
2) Broke into a store, mall, or warehouse	1	2	3	4	5
3) Blamed others	1	2	3	4	5
4) Hit back when hit by others	1	2	3	4	5
5) Broke the windows of an empty building	1	2	3	4	5
6) Tried to hurt someone's feelings	1	2	3	4	5
7) Got angry quickly	1	2	3	4	5
8) Shoplifted things	1	2	3	4	5
9) Made fun of someone behind their back	1	2	3	4	5
10) Threatened others	1	2	3	4	5
11) Littered public areas by smashing bottles, tipping trash cans, etc.	1	2	3	4	5
12) Excluded someone from group activities when angry with him/her	1	2	3	4	5
13) Had trouble controlling temper	1	2	3	4	5
14) Stole a bicycle	1	2	3	4	5
15) Gave someone the silent treatment when angry with him/her	1	2	3	4	5
16) Hit others when provoked	1	2	3	4	5
17) Stole property from school or work	1	2	3	4	5

	1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
18) Revealed someone's secrets when angry with him/her	1	2	3	4	5
19) Got into fights more than the average person	1	2	3	4	5
20) Left home for an extended period of time without telling family/friends	1	2	3	4	5
21) Intentionally damaged someone's reputation	1	2	3	4	5
22) Swore or yelled at others	1	2	3	4	5
23) Sold drugs, including marijuana (dagga)	1	2	3	4	5
24) Tried to turn others against someone when angry with him/her	1	2	3	4	5
25) Got into physical fights	1	2	3	4	5
26) Was suspended, expelled, or fired from school or work	1	2	3	4	5
27) Called someone names behind his/her back	1	2	3	4	5
28) Felt better after hitting	1	2	3	4	5
29) Failed to pay debts	1	2	3	4	5
30) Was rude towards others	1	2	3	4	5
31) Had trouble keeping a job	1	2	3	4	5
32) Made negative comments about other's appearance	1	2	3	4	5

Section D

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Please answer the following questions about your father or a father-like figure. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement. If you did not have a father or a father-like figure please move on to the next section.

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
1) I'm afraid that I will lose my father's love	1	2	3	4	5	6	7
2) My father really understands me and my needs.	1	2	3	4	5	6	7
3) I often worry that my father will not want to stay with me.	1	2	3	4	5	6	7
4) It's easy for me to be affectionate with my father.	1	2	3	4	5	6	7
5) I often worry that my father doesn't really love me.	1	2	3	4	5	6	7
6) I find it easy to depend on my father.	1	2	3	4	5	6	7
7) I worry that my father won't care about me as much as I care about him.	1	2	3	4	5	6	7
8) I feel comfortable depending on my father.	1	2	3	4	5	6	7
9) I often wish that my father's feelings for me were as strong as my feelings for him.	1	2	3	4	5	6	7
10) I am nervous when my father get too close to me.	1	2	3	4	5	6	7
11) I worry a lot about my relationships.	1	2	3	4	5	6	7
12) I talk things over with my father.	1	2	3	4	5	6	7
13) When my father is out of sight, I worry that he might become interested in someone else, as his child.	1	2	3	4	5	6	7

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
14) I tell my father just about everything.	1	2	3	4	5	6	7
15) When I show my feelings for my father, I'm afraid he will not feel the same about me.	1	2	3	4	5	6	7
16) It helps to turn to my father in times of need.	1	2	3	4	5	6	7
17) I rarely worry about my father leaving me.	1	2	3	4	5	6	7
18) I usually discuss my problems and concerns with my father.	1	2	3	4	5	6	7
19) My father makes me doubt myself.	1	2	3	4	5	6	7
20) It's not difficult for me to get close to my father.	1	2	3	4	5	6	7
21) I do not often worry about being abandoned.	1	2	3	4	5	6	7
22) I find it relatively easy to get close to my father.	1	2	3	4	5	6	7
23) I find that my father doesn’t want to get as close as I would like.	1	2	3	4	5	6	7
24) I get uncomfortable when a my father wants to be very close.	1	2	3	4	5	6	7
25) Sometimes my father changes his feelings about me for no apparent reason.	1	2	3	4	5	6	7
26) I prefer not to be too close to my father.	1	2	3	4	5	6	7
27) My desire to be very close sometimes scares people away.	1	2	3	4	5	6	7
28) I don't feel comfortable opening up to my father.	1	2	3	4	5	6	7
29) I'm afraid that once my father gets to know me, he won't like who I really am.	1	2	3	4	5	6	7
30) I am very comfortable being close to my father.	1	2	3	4	5	6	7

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
31) It makes me mad that I don't get the affection and support I need from my father.	1	2	3	4	5	6	7
32) I find it difficult to allow myself to depend on my father.	1	2	3	4	5	6	7
33) I worry that I won't measure up to other people.	1	2	3	4	5	6	7
34) I feel comfortable sharing my private thoughts and feelings with my father.	1	2	3	4	5	6	7
35) My father only seems to notice me when I’m angry.	1	2	3	4	5	6	7
36) I prefer not to show my father how I feel deep down.	1	2	3	4	5	6	7

Section E

The following is a set of statements about how you usually act. Please circle either true or false next to each statement.

1) It is sometimes hard for me to go on with my work if I am not encouraged.	TRUE	FALSE
2) I sometimes feel resentful when I don't get my own way.	TRUE	FALSE
3) On a few occasions, I have given up doing something because I thought too little of my ability.	TRUE	FALSE
4) There have been times when I felt like rebelling against people in authority even though I knew they were right.	TRUE	FALSE
5) No matter who I'm talking to, I'm always a good listener.	TRUE	FALSE
6) There have been occasions when I took advantage of someone.	TRUE	FALSE
7) I'm always willing to admit it when I make a mistake.	TRUE	FALSE
8) I sometimes try to get even, rather than forgive and forget.	TRUE	FALSE
9) I am always courteous, even to people who are disagreeable.	TRUE	FALSE
10) I have never been irked when people expressed ideas very different from my own.	TRUE	FALSE
11) There have been times when I was quite jealous of the good fortune of others.	TRUE	FALSE
12) I am sometimes irritated by people who ask favours of me.	TRUE	FALSE
13) I have never deliberately said something that hurt someone's feelings.	TRUE	FALSE

Section F

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Please answer the following questions about your romantic partner, either your current romantic partner or most recent romantic partner. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement. If you have never had an intimate partner, please move on to the next section.

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
1) I'm afraid that I will lose my partner's love	1	2	3	4	5	6	7
2) My partner really understands me and my needs.	1	2	3	4	5	6	7
3) I often worry that my partner will not want to stay with me.	1	2	3	4	5	6	7
4) It's easy for me to be affectionate with my partner.	1	2	3	4	5	6	7
5) I often worry that my partner doesn't really love me.	1	2	3	4	5	6	7
6) I find it easy to depend on romantic partners.	1	2	3	4	5	6	7
7) I worry that romantic partners won’t care about me as much as I care about them.	1	2	3	4	5	6	7
8) I feel comfortable depending on romantic partners.	1	2	3	4	5	6	7
9) I often wish that my partner's feelings for me were as strong as my feelings for him or her.	1	2	3	4	5	6	7
10) I am nervous when partners get too close to me.	1	2	3	4	5	6	7
11) I worry a lot about my relationships.	1	2	3	4	5	6	7
12) I talk things over with my partner.	1	2	3	4	5	6	7

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
13) When my partner is out of sight, I worry that he or she might become interested in someone else.	1	2	3	4	5	6	7
14) I tell my partner just about everything.	1	2	3	4	5	6	7
15) When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.	1	2	3	4	5	6	7
16) It helps to turn to my romantic partner in times of need.	1	2	3	4	5	6	7
17) I rarely worry about my partner leaving me.	1	2	3	4	5	6	7
18) I usually discuss my problems and concerns with my partner.	1	2	3	4	5	6	7
19) My romantic partner makes me doubt myself.	1	2	3	4	5	6	7
20) It's not difficult for me to get close to my partner.	1	2	3	4	5	6	7
21) I do not often worry about being abandoned.	1	2	3	4	5	6	7
22) I find it relatively easy to get close to my partner.	1	2	3	4	5	6	7
23) I find that my partner(s) don't want to get as close as I would like.	1	2	3	4	5	6	7
24) I get uncomfortable when a romantic partner wants to be very close.	1	2	3	4	5	6	7
25) Sometimes romantic partners change their feelings about me for no apparent reason.	1	2	3	4	5	6	7
26) I prefer not to be too close to romantic partners.	1	2	3	4	5	6	7
27) My desire to be very close sometimes scares people away.	1	2	3	4	5	6	7
28) I don't feel comfortable opening up to romantic partners.	1	2	3	4	5	6	7
29) I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.	1	2	3	4	5	6	7

	1 Strongly Agree	2 Agree	3 Somewhat Agree	4 Neither Agree or Disagree	5 Somewhat Disagree	6 Disagree	7 Strongly Disagree
30) I am very comfortable being close to romantic partners.	1	2	3	4	5	6	7
31) It makes me mad that I don't get the affection and support I need from my partner.	1	2	3	4	5	6	7
32) I find it difficult to allow myself to depend on romantic partners.	1	2	3	4	5	6	7
33) I worry that I won't measure up to other people.	1	2	3	4	5	6	7
34) I feel comfortable sharing my private thoughts and feelings with my partner.	1	2	3	4	5	6	7
35) My partner only seems to notice me when I’m angry.	1	2	3	4	5	6	7
36) I prefer not to show a partner how I feel deep down.	1	2	3	4	5	6	7

Thank you for participating in this study, you have completed the questionnaire.

Appendix C: Afrikaans Consent Form

Universiteit van Kaapstad
Departement Sielkunde
Toestemmingsvorm

1. **Uitnodiging en doel**

U word uitgenooi om deel te neem aan ’n navorsingstudie oor hoe verhoudings gedrag beïnvloed. Ek is ’n meestersgraadstudent by die Departement Sielkunde aan die Universiteit van Kaapstad.

2. **Prosedures**

Indien u besluit om aan hierdie studie deel te neem, sal ons u vra om ’n vraelys in te vul. Die vrae sal handel oor u verhoudings en u algemene gedrag. Die opname sal ongeveer 30–45 minute neem en u kan enige vraag oorslaan wat u nie wil beantwoord nie.

3. **Gaan die studie jou seermaak of jou laat sleg voel?**

Die studie gaan u nie seermaak nie. Dit mag veroorsaak dat u ongemaklike voel, want dit vra vrae oor u verhoudings. Daar word byvoorbeeld vir u gevra oor u verhouding met u moeder, vader en liefdesmaat, asook oor sekere wyses waarop u optree. As u na die studie ontsteld is beveel ons aan dat u LifeLine, ‘n 24-uur gratis beradingsdiens, skakel by 082 231 0805, of met u sosiale werker gesels indien u tans met NICRO werk.

4. **Voordele**

Daar is geen direkte voordele vir u indien u aan die studie deelneem nie. Die kennis wat ons deur die studie opdoen kan egter gebruik work om behandelingsprogramme te verbeter asook om misdaadsvoorkomingsprogramme te ontwikkel.

5. **Moet ek deelneem?**

U hoef nie aan hierdie studie deel te neem nie – dit is u eie keuse. Indien u kies om nie deel te neem nie, sal dit nie u verhouding met NICRO of hulle vonnis beïnvloed of enige ander negatiewe gevolge hê nie. U kan nou ja sê en later u besluit verander. Al wat u dan hoef te doen is om vir ons te laat weet u wil stop.

6. **Wie gaan weet dat ek deelgeneem het aan die studie?**

Ons sal streng voorsorgmaatreëls tref om regdeur die studie u persoonlike inligting te beskerm. U naam sal nooit aan u vraelys gekoppel word nie, wat sal verseker dat u persoonlike inligting vertroulik (privaat) bly. Die navorser sal die enigste persoon wees wat te

enige tyd toegang tot u persoonlike inligting het.

7. **Vrae**

Indien u vrae oor die navorsing het, kontak asseblief vir Megan Barber by BRBMEG001@myuct.ac.za, of haar studieleier, Lauren Wild, by lauren.wild@uct.ac.za of 021 650 4607.

Indien u enige vrae het oor u regte as deelnemer aan die studie, of bekommernisse of klagtes oor die navorsing het, kontak asseblief vir Rosalind Adams by die Departement Sielkunde aan die Universiteit van Kaapstad by Rosalind.adams@uct.ac.za of 021 650 3417.

11. **Handtekeninge**

Ek is ingelig oor die prosedures en doel van die studie, soos hierbo uiteengesit, insluitende enige risiko's wat deelname kan inhou. Ek het tyd gekry om vrae te vra en die ondersoeker het hierdie vrae tot die beste van sy/haar vermoë beantwoord. Ek het toegang tot 'n afskrif van hierdie toestemmingsvorm.

Ondersoeker se handtekening Datum

Deelnemer se handtekening Datum

Appendix D: Afrikaans Questionnaire

Afdeling A

Vul asseblief al die vrae so goed as moontlik in.

1. Wat is jou ouderdom (in jare)

Omkring asseblief die mees gepaste antwoord.

2. Hoe sal jy jouself klassifiseer?

Manlik	Vroulik

3. Hoe sal jy jouself klassifiseer?

Wit	Swart	Kleurling	Indiër/Asiaat/Ander

4. Wat is jou huwelikstatus?

Ongetroud	Getroud	Geskei	Ander

5. Wat is die hoogste akademiese vlak wat jy behaal het?

Graad 0-11	Graad 12	Kollege/Universiteit

6. Hoeveel is jou gesin/huishouding se maandelikse inkomste voor belasting?

R 0 - R 4 500	R4 501 tot R52 000	Meer as R52 000

7. Wat is jou huidige werkstatus

Werkloos	Het ’n werk	Ander (bv. student, pensioenaris)

8. Is jy al ooit aan ‘n kriminele oortreding skuldig bevind en gevonnis of na ’n afwendingsprogram gestuur?

Ja	Nee

8 a). Indien ja, spesifiseer asseblief wat die aanklag was.

Afdeling B

Die stellings hieronder handel oor hoe jy voel in emosioneel intieme verhoudings. Ons stel belang in hoe jy oor die algemeen verhoudings ervaar, nie net oor wat in ‘n huidige verhouding gebeur nie. Beantwoord asseblief die volgende vrae oor jou moeder of ‘n moederlike-figuur. Reageer op elke stelling deur die nommer te omkring wat aandui tot watter mate jy met die stelling saamstem of nie saamstem nie. Indien jy nie ‘n moeder of ‘n moederlike-figuur het nie beweeg asseblief aan na die volgende afdeling.

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens	6 Stem nie saam nie	7 Stem glad nie saam nie
1) Ek is bang dat ek my moeder se liefde sal verloor.	1	2	3	4	5	6	7
2) My moeder verstaan my en my behoeftes werklik.	1	2	3	4	5	6	7
3) Ek bekommer my dikwels dat my moeder nie by my sal wil bly nie.	1	2	3	4	5	6	7
4) Dit is vir my maklik om liefdevol teenoor my moeder te wees.	1	2	3	4	5	6	7
5) Ek bekommer my dikwels dat my moeder nie werklik lief is vir my nie.	1	2	3	4	5	6	7
6) Dit is vir my maklik om op my moeder staat te maak.	1	2	3	4	5	6	7
7) Ek is bekommerd dat my moeder nie soveel vir my sal omgee soos wat ek vir haar omgee nie.	1	2	3	4	5	6	7
8) Ek voel gemaklik daarmee om op my moeder staat te maak.	1	2	3	4	5	6	7
9) Ek wens dikwels dat my moeder se gevoelens vir my so sterk is soos my gevoelens vir haar.	1	2	3	4	5	6	7
10) Ek is senuweeagtig as my moeder te na aan my kom.	1	2	3	4	5	6	7

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens	6 Stem nie saam nie	7 Stem glad nie saam nie
11) Ek bekommer my baie oor my verhoudings.	1	2	3	4	5	6	7
12) Ek gesels dinge deur met my moeder.	1	2	3	4	5	6	7
13) Wanneer my moeder nie by my is nie, bekommer ek my dat sy in iemand anders sal begin belangstel asof dit haar kind is.	1	2	3	4	5	6	7
14) Ek vertel my moeder omtrent alles.	1	2	3	4	5	6	7
15) Wanneer ek my gevoelens vir my moeder wys, is ek bang dat sy nie dieselfde oor my sal voel nie.	1	2	3	4	5	6	7
16) Dit help om in tye van nood na my moeder draai.	1	2	3	4	5	6	7
17) Ek bekommer my selde daaroor dat my moeder my sal verlaat.	1	2	3	4	5	6	7
18) Ek bespreek gewoonlik my probleme en bekommernisse met my moeder.	1	2	3	4	5	6	7
19) My moeder laat my aan myself twyfel.	1	2	3	4	5	6	7
20) Dit is nie vir my moeilik om na aan my moeder te kom nie.	1	2	3	4	5	6	7
21) Ek bekommer my nie gereeld daaroor dat ek verlaat sal word nie.	1	2	3	4	5	6	7
22) Ek vind dit relatief maklik om na aan my moeder te kom.	1	2	3	4	5	6	7
23) Ek vind dat my moeder nie so naby wil kom soos wat ek wil hê nie.	1	2	3	4	5	6	7
24) Ek raak ongemaklik wanneer my moeder baie na aan my wil wees.	1	2	3	4	5	6	7

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens	6 Stem nie saam nie	7 Stem glad nie saam nie
25) My moeder verander soms haar gevoelens teenoor my vir geen ooglopende rede nie.	1	2	3	4	5	6	7
26) Ek verkies om nie te na aan my moeder te wees nie.	1	2	3	4	5	6	7
27) My begeerte om baie naby te wees, skrik mense soms af.	1	2	3	4	5	6	7
28) Ek voel nie gemaklik daarmee om oop te maak teenoor my moeder nie.	1	2	3	4	5	6	7
29) Ek is bang dat my moeder nie van my sal hou as sy my leer ken soos ek regtig is nie.	1	2	3	4	5	6	7
30) Ek is baie gemaklik daarmee om na aan my moeder te wees.	1	2	3	4	5	6	7
31) Dit maak my kwaad dat ek nie die liefkosing en ondersteuning kry wat ek van my moeder nodig het nie.	1	2	3	4	5	6	7
32) Ek vind dit moeilik om myself toe te laat om op my moeder staat te maak.	1	2	3	4	5	6	7
33) Ek bekommer my dat ek nie aan ander mense se standaarde sal voldoen nie.	1	2	3	4	5	6	7
34) Ek voel gemaklik daarmee om my private gedagtes en gevoelens met my moeder te deel.	1	2	3	4	5	6	7
35) Dit lyk asof my moeder my net raaksien as ek kwaad is.	1	2	3	4	5	6	7
36) Ek verkies om nie my diepste gevoelens vir my moeder te wys nie.	1	2	3	4	5	6	7

Afdeling C

Die volgende stellings handel oor jou algemene gedrag. Omkring asseblief die nommer wat die meeste op jou van toepassing is, van 1 (nooit) tot 5 (altyd).

	1 Nooit	2 Selde	3 Gereeld	4 Baie Gereeld	5 Altyd
1) Wou mense slaan	1	2	3	4	5
2) Het ingebreek by ’n winkel, winkelsentrum of pakhuis	1	2	3	4	5
3) Het ander blameer	1	2	3	4	5
4) Het teruggeslaan toe deur ander geslaan is	1	2	3	4	5
5) Het die vensters van ’n leë gebou gebreek	1	2	3	4	5
6) Het iemand se gevoelens probeer seermaak	1	2	3	4	5
7) Het gou kwaad geword	1	2	3	4	5
8) Het goed by winkels gesteel	1	2	3	4	5
9) Het iemand agter sy/haar rug bespot	1	2	3	4	5
10) Het ander persone gedreig	1	2	3	4	5
11) Het publieke areas bemors deur bottels te breek, vullisdromme om te gooi, ensovoorts	1	2	3	4	5
12) Het iemand van groepsaktiwiteite uitgesluit terwyl vir hom/haar kwaad was	1	2	3	4	5
13) Het dit moeilik gevind om humeur te beteuel	1	2	3	4	5
14) Het ’n fiets gesteel	1	2	3	4	5

	1 Nooit	2 Selde	3 Gereeld	4 Baie Gereeld	5 Altyd
15) Het iemand geïgnoreer terwyl vir hulle kwaad was	1	2	3	4	5
16) Het ander geslaan toe uitgelok was	1	2	3	4	5
17) Het skool of werk se eiendom gesteel	1	2	3	4	5
18) Het iemand se geheime verklap terwyl vir hulle kwaad was	1	2	3	4	5
19) Het meer as die gemiddelde persoon baklei	1	2	3	4	5
20) Het die huis vir ‘n geruime tydperk verlaat sonder om familie of vriende te vertel	1	2	3	4	5
21) Het doelbewus iemand se reputasie skade aangedoen	1	2	3	4	5
22) Het op ander mense geskree of gevloek	1	2	3	4	5
23) Het dwelms, insluitend marijuana (dagga), verkoop	1	2	3	4	5
24) Het mense probeer draai teen ander mense vir wie ek kwaad was	1	2	3	4	5
25) Het in fisiese gevegte betrokke geraak	1	2	3	4	5
26) Is by die skool of werk uitgesit, geskors, of afgedank	1	2	3	4	5
27) Het iemand agter sy/haar rug name genoem	1	2	3	4	5
28) Het beter gevoel nadat ek geslaan het	1	2	3	4	5
29) Het nagelaat om skuld te betaal	1	2	3	4	5
30) Was ongeskik teenoor ander	1	2	3	4	5
31) Het gesukkel om ’n werk te behou	1	2	3	4	5
32) Het negatiewe aanmerkings oor ander se voorkoms gemaak	1	2	3	4	5

Afdeling D

Die stellings hieronder handel oor hoe jy voel in emosioneel intieme verhoudings. Ons stel belang in hoe jy oor die algemeen verhoudings ervaar, nie net oor wat in ‘n huidige verhouding gebeur nie. Beantwoord asseblief die volgende vrae oor jou vader of ‘n vaderlike-figuur. Reageer op elke stelling deur die nommer te omkring wat aandui tot watter mate jy met die stelling saamstem of nie saamstem nie. Indien jy nie ‘n vader of ‘n vaderlike-figuur het nie beweeg asseblief aan na die volgende afdeling.

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens	6 Stem nie saam nie	7 Stem glad nie saam nie
1) Ek is bang dat ek my vader se liefde sal verloor.	1	2	3	4	5	6	7
2) My vader verstaan my en my behoeftes werklik.	1	2	3	4	5	6	7
3) Ek bekommer my dikwels dat my vader nie by my sal wil bly nie.	1	2	3	4	5	6	7
4) Dit is vir my maklik om liefdevol teenoor my vader te wees.	1	2	3	4	5	6	7
5) Ek bekommer my dikwels dat my vader nie werklik lief is vir my nie.	1	2	3	4	5	6	7
6) Dit is vir my maklik om op my vader staat te maak.	1	2	3	4	5	6	7
7) Ek is bekommerd dat my vader nie soveel vir my sal omgee soos wat ek vir hom omgee nie.	1	2	3	4	5	6	7
8) Ek voel gemaklik daarmee om op my vader staat te maak.	1	2	3	4	5	6	7
9) Ek wens dikwels dat my vader se gevoelens vir my so sterk is soos my gevoelens vir hom.	1	2	3	4	5	6	7
10) Ek is senuweeagtig as my vader te na aan my kom.	1	2	3	4	5	6	7
11) Ek bekommer my baie oor my verhoudings.	1	2	3	4	5	6	7

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens	6 Stem nie saam nie	7 Stem glad nie saam nie
12) Ek gesels dinge deur met my vader.	1	2	3	4	5	6	7
13) Wanneer my vader nie by my is nie, bekommer ek my dat hy in iemand anders sal begin belangstel asof dit sy kind is.	1	2	3	4	5	6	7
14) Ek vertel my vader omtrent alles.	1	2	3	4	5	6	7
15) Wanneer ek my gevoelens vir my vader wys, is ek bang dat hy nie dieselfde oor my sal voel nie.	1	2	3	4	5	6	7
16) Dit help om in tye van nood na my vader draai.	1	2	3	4	5	6	7
17) Ek bekommer my selde daaroor dat my vader my sal verlaat.	1	2	3	4	5	6	7
18) Ek bespreek gewoonlik my probleme en bekommernisse met my vader.	1	2	3	4	5	6	7
19) My vader laat my aan myself twyfel.	1	2	3	4	5	6	7
20) Dit is nie vir my moeilik om na aan my vader te kom nie.	1	2	3	4	5	6	7
21) Ek bekommer my nie gereeld daaroor dat ek verlaat sal word nie.	1	2	3	4	5	6	7
22) Ek vind dit relatief maklik om na aan my vader te kom.	1	2	3	4	5	6	7
23) Ek vind dat my vader nie so naby wil kom soos ek wil hê nie.	1	2	3	4	5	6	7
24) Ek raak ongemaklik wanneer my vader baie na aan my wil wees.	1	2	3	4	5	6	7
25) My vader verander soms sy gevoelens teenoor my vir geen ooglopende rede nie.	1	2	3	4	5	6	7

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens	6 Stem nie saam nie	7 Stem glad nie saam nie
26) Ek verkies om nie te na aan my vader te wees nie.	1	2	3	4	5	6	7
27) My begeerte om baie naby te wees, skrik mense soms af.	1	2	3	4	5	6	7
28) Ek voel nie gemaklik daarmee om oop te maak teenoor my vader nie.	1	2	3	4	5	6	7
29) Ek is bang dat my vader nie van my sal hou as hy my leer ken soos ek regtig is nie.	1	2	3	4	5	6	7
30) Ek is baie gemaklik daarmee om na aan my vader te wees.	1	2	3	4	5	6	7
31) Dit maak my kwaad dat ek nie die liefkosing en ondersteuning kry wat ek van my vader nodig het nie.	1	2	3	4	5	6	7
32) Ek vind dit moeilik om myself toe te laat om op my vader staat te maak.	1	2	3	4	5	6	7
33) Ek bekommer my dat ek nie aan ander mense se standaarde sal voldoen nie.	1	2	3	4	5	6	7
34) Ek voel gemaklik daarmee om my private gedagtes en gevoelens met my vader te deel.	1	2	3	4	5	6	7
35) Dit lyk asof my vader my net raaksien as ek kwaad is.	1	2	3	4	5	6	7
36) Ek verkies om nie my diepste gevoelens vir my vader te wys nie.	1	2	3	4	5	6	7

Afdeling E

Die volgende is ‘n lys stellings oor hoe jy gewoonlik optree. Omkring asseblief waar of onwaar langs elke stelling.

1) Dit is soms vir my moeilik om met my werk aan te gaan as ek nie aangemoedig word nie.	WAAR	ONWAAR
2) Ek voel soms gegrief as ek nie my sin kry nie.	WAAR	ONWAAR
3) Ek het al by ’n paar geleenthede opgegee met iets, omdat ek te min van my vermoëns gedink het.	WAAR	ONWAAR
4) Partykeer wou ek teen mense in gesagsposisies rebelleer, selfs al het ek geweet dat hulle reg was.	WAAR	ONWAAR
5) Dit maak nie saak met wie ek praat nie, ek is altyd ’n goeie luisteraar.	WAAR	ONWAAR
6) Daar was geleenthede waar ek iemand misbruik het.	WAAR	ONWAAR
7) Ek is altyd bereid om te erken as ek ’n fout gemaak het.	WAAR	ONWAAR
8) Ek probeer mense soms terugkry, eerder as om te vergewe en te vergeet.	WAAR	ONWAAR
9) Ek is altyd hoflik, selfs teenoor mense wat onvriendelik is.	WAAR	ONWAAR
10) Dit het my nog nooit gepla as mense idees uitspreek wat baie van my eie verskil nie.	WAAR	ONWAAR
11) Daar was kere wat ek nogal jaloers was op ander mense se goeie geluk.	WAAR	ONWAAR
12) Ek is soms geïrreteerd met mense wat gunste van my vra.	WAAR	ONWAAR
13) Ek het nog nooit doelbewus iets gesê wat iemand se gevoelens seermaak nie.	WAAR	ONWAAR

Afdeling F

Die stellings hieronder handel oor hoe jy voel in emosioneel intieme verhoudings. Ons stel belang in hoe jy oor die algemeen verhoudings ervaar, nie net oor wat in ‘n huidige verhouding gebeur nie. Beantwoord asseblief die volgende vrae oor jou liefdesmaat (“partner”), óf jou huidige óf jou mees onlangse liefdesmaat. Reageer op elke stelling deur die nommer te omkring wat aandui tot watter mate jy met die stelling saamstem of nie saamstem nie.

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens
1) Ek is bang dat ek my liefdesmaat se liefde sal verloor.	1	2	3	4	5
2) My liefdesmaat verstaan my en my behoeftes werklik.	1	2	3	4	5
3) Ek bekommer my dikwels dat my liefdesmaat nie by my sal wil bly nie.	1	2	3	4	5
4) Dit is vir my maklik om liefdevol teenoor my liefdesmaat te wees.	1	2	3	4	5
5) Ek bekommer my dikwels dat my liefdesmaat nie werklik lief is vir my nie.	1	2	3	4	5
6) Dit is vir my maklik om op my liefdesmaat staat te maak.	1	2	3	4	5
7) Ek is bekommerd dat my liefdesmaat nie soveel vir my sal omgee soos wat ek vir hom/haar omgee nie.	1	2	3	4	5
8) Ek voel gemaklik daarmee om op my liefdesmaat staat te maak.	1	2	3	4	5
9) Ek wens dikwels dat my liefdesmaat se gevoelens vir my so sterk is soos my gevoelens vir hom/haar.	1	2	3	4	5
10) Ek is senuweeagtig as my liefdesmaat te na aan my kom.	1	2	3	4	5

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens
11) Ek bekommer my baie oor my verhoudings.	1	2	3	4	5
12) Ek gesels dinge deur met my liefdesmaat.	1	2	3	4	5
13) Wanneer my liefdesmaat nie by my is nie, bekommer ek my dat hy/sy in iemand anders sal begin belangstel	1	2	3	4	5
14) Ek vertel my liefdesmaat omtrent alles.	1	2	3	4	5
15) Wanneer ek my gevoelens vir my liefdesmaat wys, is ek bang dat hy/sy nie dieselfde oor my sal voel nie.	1	2	3	4	5
16) Dit help om in tye van nood na my liefdesmaat draai.	1	2	3	4	5
17) Ek bekommer my selde daaroor dat my liefdesmaat my sal verlaat.	1	2	3	4	5
18) Ek bespreek gewoonlik my probleme en bekommernisse met my liefdesmaat.	1	2	3	4	5
19) My liefdesmaat laat my aan myself twyfel.	1	2	3	4	5
20) Dit is nie vir my moeilik om na aan my liefdesmaat te kom nie.	1	2	3	4	5
21) Ek bekommer my nie gereeld daaroor dat ek verlaat sal word nie.	1	2	3	4	5
22) Ek vind dit relatief maklik om na aan my liefdesmaat te kom.	1	2	3	4	5
23) Ek vind dat my liefdesmaat nie so naby wil kom soos ek wil hê nie.	1	2	3	4	5
24) Ek raak ongemaklik wanneer my liefdesmaat baie na aan my wil wees.	1	2	3	4	5

	1 Stem sterk saam	2 Stem saam	3 Stem effens saam	4 Stem nie saam nie en verskil ook nie	5 Verskil effens
25) My liefdesmaat verander soms sy/haar gevoelens teenoor my vir geen ooglopende rede nie.	1	2	3	4	5
26) Ek verkies om nie te na aan my liefdesmaat te wees nie.	1	2	3	4	5
27) My begeerte om baie naby te wees, skrik mense soms af.	1	2	3	4	5
28) Ek voel nie gemaklik daarmee om oop te maak teenoor my liefdesmaat nie.	1	2	3	4	5
29) Ek is bang dat my liefdesmaat nie van my sal hou as hy/sy my leer ken soos ek regtig is nie.	1	2	3	4	5
30) Ek is baie gemaklik daarmee om na aan my liefdesmaat te wees.	1	2	3	4	5
31) Dit maak my kwaad dat ek nie die liefkosing en ondersteuning kry wat ek van my liefdesmaat nodig het nie.	1	2	3	4	5
32) Ek vind dit moeilik om myself toe te laat om op my liefdesmaat staat te maak.	1	2	3	4	5
33) Ek bekommer my dat ek nie aan ander mense se standaarde sal voldoen nie.	1	2	3	4	5
34) Ek voel gemaklik daarmee om my private gedagtes en gevoelens met my liefdesmaat te deel.	1	2	3	4	5
35) Dit lyk asof my liefdesmaat my net raaksien as ek kwaad is.	1	2	3	4	5
36) Ek verkies om nie my diepste gevoelens vir my liefdesmaat te wys nie.	1	2	3	4	5

Baie dankie dat jy deelgeneem het aan hierdie studie. Jy het die vraelys voltooi.

Appendix E: Ethical Approval Form

UNIVERSITY OF CAPE TOWN

DC: HUM /

FACULTY OF HUMANITIES

PROPOSAL APPROVAL FORM

DOCTORATE (A research proposal must accompany this form)	RESEARCH MASTERS (A research proposal must accompany this form)	X C/W MASTERS

SECTION A: (To be completed by candidate)
Please complete this form and return it to the Faculty Office once you have obtained the signatures of the supervisor(s) and Head of Department.

Surname	Barber				**First Name(s)**	Megan
Title	**Mr.**	**Ms.** X	**Mrs.**	**Miss**	**Student No**	BRBMEG001
Address	104 Firdalia Heights – Firdale Avenue – Gardens - 8001					
Telephone(Home	0711804518				**Work/Cell**	0216863182
Note: Your UCT Email address is the default email address for all official communication – make sure that you access it regularly.						

Department	Psychology
Title of Dissertation: The relationship between attachment styles and offending in a South African context	

Qualifications held			
Degree/Diploma	**Major(s) &) Subjects**	**Month/Year awarded**	**University**

Signature of candidate:_____ **Date:**_____

SECTION B:

	Name	Signature	Date
Supervisor	Dr. Lauren Wild		5/4/2016
Co-supervisor (if applicable)			
HOD	A/Prof. Catherine Ward		5/4/2016
Deputy-Dean: Research			
Ethics approval obtained where applicable	on behalf of Departmental Ethics Committee		5/4/2016 Dei