

**ROMANTIC JEALOUSY:**  
**The Role of Attachment Style and Social Comparison Processes**  
**in the Violent Expression of Romantic Jealousy.**

Thesis submitted as part requirement  
for the fulfilment of the degree of  
Doctorate of Clinical Psychology.  
University of Leicester.

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**July 2000**

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***in the Violent Expression of Romantic Jealousy.***

**Jeanette Allen.**

**Abstract**

The aim of this study was to investigate the experience of romantic jealousy in a group of men who have committed a serious offence against an intimate partner. The study drew on evolutionary theory, specifically looking at attachment theory and social comparison processes to account for individual differences in the experience and violent expression of romantic jealousy.

This study was primarily an unrelated between groups comparison study, correlations of the dependent variables were also made to investigate the associations between these factors. The participants included "domestically violent" men (men with a conviction of violence against their partner), "extra-domestically violent" men (men with a conviction of violence but not against their partner) and "non-violent" men. The dependent variables were interpersonal jealousy, attachment style, anger, abusiveness, internalised shame, and social comparison in adulthood and in adolescence.

The results found predominantly insecure attachment styles within the sample of violent men, with "domestically violent" men reporting significantly higher attachment anxiety than either of the other two groups. Attachment anxiety was found to be associated with jealousy, anger and abusiveness in intimate relationships. Mixed support was provided for the role of social comparison processes, with the results highlighting the perception of feeling different to and unaccepted by ones peer group in both adolescence and adulthood as being associated with jealousy, anger, abusiveness and internalised shame.

It is suggested that the internal working model of the self, characteristic of attachment anxiety is a "shame-based" model, involving global attacks on the self, revealing the intricate connection with feelings of alienation and rejection.

Clinical implications of the results of this study are discussed and areas for further research are highlighted.

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## **1.0 Introduction.**

*O, beware, my lord, of jealousy,  
It is the green-ey'd monster, which doth mock  
The meat it feeds on.*

*(Shakespeare, Orthello, Act III, Scene III)*

The word jealousy is derived from the same Greek root as that for zealous, *zelos*. Zeal is the reverent devotion to a person or object. Jealousy refers to the belief or suspicion that one is in danger of losing that which one is devoted to. Jealousy is an old and recurring theme in human relationships, with cross-cultural legendary significance. Although cultures differ in the frequency and forms of their jealousy, there are no reports of jealous-free societies. (Buunk, Angleitner, Oubaid and Buss, 1996; Adams, Rubin, Lau and Gruen, 1994; Hupka, 1991).

The negative sequelae of jealousy and the associated dilemmas are well captured in the literature as well as in the popular press. However, jealousy also appears to be something that is positive or desired, perceived as a sign of loving and caring. Several authors have noted that jealousy is often functional in serving to improve communication, commitment and understanding and, as such, is primarily used for mate retention (Power and Dalglish, 1997; Sheets, Fredendall and Claypool, 1997; Bringle, 1995). De Silva (1997) reported the presence of clinical cases where partners complain about the absence of jealousy on the part of the other, or engage in jealousy-provoking behaviours in order to elicit a response of loving and caring by their partner. The paradox of jealousy would appear to account, in part, for the fascination with it. However, despite such fascination, the empirical study of jealousy has only relatively recently received much in the way of research attention (e.g. Buss, 1995b; Salovey, 1991; Buunk and Hupka, 1987; White and Mullen, 1989). The increased interest in romantic jealousy owes much to the culminating evidence that male sexual jealousy is a major cause of wife battering and homicide across a large number of cultures (e.g. Milroy, 1995).

This study aims to investigate the experience of romantic jealousy in a group of men who have been convicted of violent offences against their partner / ex-partner.

The following section will briefly discuss the literature relating to spousal assault and spousal homicide. The correlates of intimate violence will be discussed highlighting the role of romantic jealousy.

## **1.1. Spousal Assault and Jealousy.**

### **1.1.1. Incidence of Spousal Assault.**

Domestic violence is defined as encompassing a range of behaviours including, physical, sexual or psychological abuse perpetrated by partners, former partners, family members, household members and within other close personal relationships (Goodyear-Smith and Laidlow 1999). The term "spousal assault" is used to refer to domestic violence perpetrated by a man or a woman against someone with whom he or she has had an intimate sexual relationship (Kropp, Hart, Webster and Eaves 1995; Gelles and Straus 1988; Straus, Gelles and Steinmetz 1980).

Surveys in both the USA and the UK, show at least one in four married women report that they have been hit by their husband (Straus, Gelles and Steinmetz 1988, 1980). It is estimated that, on average, each year from 1992 to 1996, 8 out of every 1,000 women were physically and/or sexually assaulted by a current or former partner compared to 1 of 1,000 men (McFarlane, Willson, Malecha and Lemmy, 2000).

National Crime Statistics consistently report men as the perpetrators and women as the victims of spousal abuse. Goodyear-Smith and Laidlow (1999) argue that such statistics are not a reliable reflection of the levels of domestic violence perpetrated by women, citing under-reporting by men and the reduced likelihood of women being charged with domestic violence, as confounding variables. Numerous epidemiological surveys do indeed find that women report perpetrating as much violence against their partners as men, a finding which is consistent across many countries (McFarlane, Willson, Malecha and Lemmy, 2000; Moffitt and Caspi, 1998; Rollins and Oheneba, 1990; Brinkerhoff and Lupin, 1988; Steinmetz, 1981). Several authors have strongly criticised such studies in that they do not focus on the motives for spousal violence. It is frequently suggested that women's violence towards their male partners is qualitatively different, in that it

tends to be in retaliation or self defence to the violence perpetrated by their partner (Polk and Ranson, 1991; Browne, 1987; Ewing, 1987).

While it is recognised that females are also perpetrators of spousal abuse, Kropp, Hart, Webster and Eaves (1985) suggest that male violence towards women is considered the most serious form of spousal assault due to its prevalence, its repetitive nature and its high risk of morbidity and mortality.

" Clearly, while men and women engage in violence equally within their relationship, those men who hit, hit harder, and women sustain more injuries"

(Goodyear-Smith and Laidlow 1999, p.291).

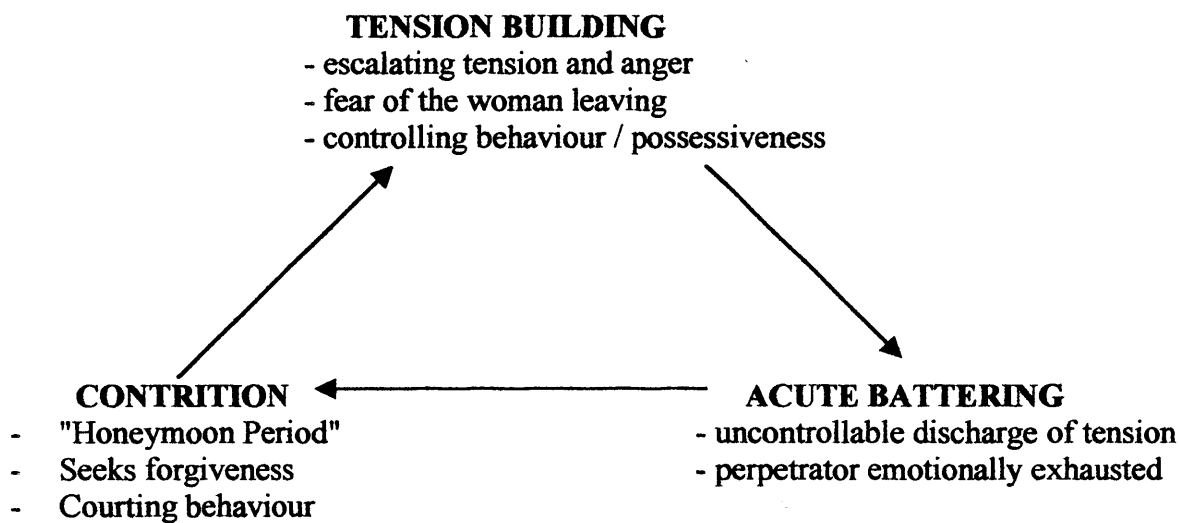
Straus (1993) reported a 42% greater frequency of severe attacks by husbands compared to wives and that men were more likely to resort to more dangerous and injurious conflict tactics, such as threatening with or using a knife or a gun. It is perhaps unsurprising then, that there has been much more emphasis on men as perpetrators of spousal abuse. In spite of such an emphasis, systematic research concerning male aggression towards women remains somewhat limited (National Research Council 1996).

#### 1.1.2. The "Cycle of Violence."

In her seminal study of 120 battered women, Walker (1979) described what she termed the "cycle of violence". The cycle consists of three stages, namely; tension building, acute battering and contrition (Ref. Fig.1). The first phase is characterised by escalating tension and anger on the part of the man, accompanied by fear of the woman leaving and jealousy and possessiveness aimed at keeping the woman captive. Phase two, "is characterised by the uncontrollable discharge of tensions that have built up during phase one" (Walker 1979, pp.59).

Walker (1979) reported that phase two typically lasts anything from 2 - 24 hours and only ends when the perpetrator is, "exhausted and emotionally depleted" (Walker 1979, p. 61). Phase three is characterised by contrition, confession and promises of reform. This phase is sometimes referred to as the "Honeymoon period" in the literature (Coleman, 1997) and the analogy to "courting" behaviour is made as the abuser seeks forgiveness. This behaviour persists until the woman has emotionally returned to the relationship when, as tension rebuilds, the cycle begins again (Dutton 1995a).

**Figure.1: The Cycle of Violence.**



#### 1.1.3. Spousal Homicide.

Spousal homicide is typically thought to be the end result of a long history of escalating violence (Brown and Herbert, 1997; Ewing, 1987).

Across all cultures, homicide occurs less often amongst strangers than among persons who know each other. The rate of stranger homicides range from 9% in South Australia (Grabosby, Koshnitsky, Bacaraz and Boyce, 1981) to 32% in Indiana (Hewitt, 1988), indicating the large majority of homicides occur between people who know each other. More importantly homicide is likely not only to occur among people who know each other, but in situations where the victim and perpetrator share a bond of sexual intimacy (Greenfield et al, 1998; Rasche, 1989, Daly and Wilson, 1988; Wallace, 1986). With the exception of serial killers, almost all cases of males killing females occur in the context of an ongoing intimate relationship and frequently in the process of real or perceived relationship dissolution (Crawford and Gartner 1992).

Polk and Ranson (1991) analysed 121 homicide case studies, prepared from the Coroner files for the years 1985 and 1986. Of these cases they found that 51% involved victims and offenders linked by some sort of intimate relationship, with 31% (38 cases) involving relationships of sexual intimacy. Of those in an intimate relationship, analysis revealed that women were more likely to be the victims (29 of the 38 cases) and that in the great majority of cases, there was a



history of domestic violence (27 of the 29 female victims). The most dominant sub-theme was that of possessiveness and jealousy, usually at the point of perceived relationship dissolution. This supports the findings in the domestic violence literature that women are most vulnerable to extreme acts of violence at the point at which they decide to try and terminate the relationship (Coleman 1997; Pagelow, 1992; Adams, 1990; Wallace, 1986).

The theme of jealousy was particularly strong in the cases of the younger women victims, where the study found entwined motives of possession and a notion of the woman as exclusive property. In all of the cases where women killed their male partner, they were protecting themselves from violence they had experienced from their partner, often violence which was specifically provoked by jealousy on the part of the male.

Family violence is often associated with environmental stressors such as loss of jobs, family death and poverty (Emery and Laumann-Billings 1995). Research consistently suggests that men who engage in spousal abuse are insecure, jealous, possessive with many anxieties over inferiority, inadequacy and abandonment (Dutton, 1995a; Dutton, 1995b; Saunders, 1992). Intimate violence is also strongly associated with exposure to violence and abuse in childhood and a background of family adversity (Sorensen et al, 1996; Emery and Laumann-Billings, 1995). However, this is also true of violence in general and there is little that differentiates domestically violent men from extra-domestically violent men, in terms of the predictors of violence. More importantly, men who are violent to their spouses are more likely than the general population to engage in violence towards other people (Goodyear-Smith and Laidlow, 1999; Sorenson et al, 1996). A history of violence within the family of origin has not always been found to be a comprehensive predictor of intimate violence; a significant percentage of people from violent families do not experience or engage in abusive behaviour towards intimate partners (Wisdom, 1989). However, Kane, Staiger and Ricciardelli (2000) reported that a difficulty with domestic violence research is that previous studies have neglected to include comparison groups or have relied on university students as controls (Campbell and Muncer, 1994; Lightdale and Prentice, 1994; Russell and Hulson, 1992).

The research to date consistently reports that jealousy is a major factor in domestic violence and spousal homicide. Although many of the predictors of such abusive acts have been identified, this

in itself this does not offer a comprehensive account of the processes underlying romantic jealousy leading to abusive acts against intimates.

The following section briefly reviews the literature on romantic jealousy and proposes a situational conceptualisation of romantic jealousy, drawing on concepts originating from evolutionary theory. The situational model of romantic jealousy proposes that jealousy is the result of negative social comparison within the context of a perceived threat to an attachment relationship. Attachment theory and the process of social comparison are discussed, with particular attention to how they may relate to jealousy and abusive acts towards intimates.

## **1.2. Romantic Jealousy.**

### **1.2.1. Definition of Romantic Jealousy.**

The literature on jealousy suggests that jealousy emerges at an early age, often before three years of age (Hinde, 1997; Masciuch and Kineapple, 1993). It does not usually lead to major problems for the individual or for others involved. However, when it is excessive it can cause considerable distress and difficulty both to the individual experiencing the feelings of jealousy and the person on whom the jealousy is focused (Marks and de Silva, 1991; Buunk and Bringle, 1987).

"Romantic jealousy" and "sexual jealousy" are terms which appear to be used interchangeably in the literature, when referring to jealousy that occurs within the context of a couple relationship (Pines and Friedman, 1998; Daly, Wilson and Weghorst, 1982). White and Mullen (1989) define romantic jealousy as, "a complex of thoughts, emotions and actions that follows loss of, or threat to, self-esteem and / or the existence or quality of the romantic relationship. The perceived loss or threat is generated by the perception of a real or potential romantic attraction between ones partner and a (perhaps imaginary) rival" (White and Mullen, 1989, pp. 9).

Within this definition, jealousy can result from the anticipation of the end of a relationship, but may also arise due to the threat a rival poses to the quality of the primary relationship, e.g. diminished trust, disruption of emotional support or loss of the sense of uniqueness. The above definition of romantic jealousy also covers the problem of defining unrequited love, as this is conceptualised as being triggered by loss of, or threat to, self-esteem.

The debate about what differentiates "morbid" jealousy from "problematic " jealousy is still one that rages in the literature. Some authors consider morbid jealousy to include a belief or suspicion of sexual infidelity on the part of the partner (Tarrier, Beckett, Harwood and Ahmed, 1989). However, de Silva (1997) considers the more crucial element to be fear of loss or threat to the quality of the relationship. Jealousy is defined as assuming morbid or maladaptive dimensions when it causes distress to the jealous person and / or the target person, and disrupts the functioning of one or both of them in the relationship. In this sense the term morbid is descriptive in manner, denoting the essential maladaptive or dysfunctional nature of jealousy within the relationship.

White and Mullen (1989) classify jealousy into three categories, namely; normal reactive jealousy, pathological reactive jealousy, and symptomatic jealousy. The final category of symptomatic jealousy, refers to jealousy characterised by delusional beliefs about the partner's behaviour, and is considered to be symptomatic, or part of, other psychiatric illnesses (Tarrier, Beckett, Harwood and Bishay, 1990). This corresponds to the "delusional disorder- jealous type" in the DSM-IV. de Silva (1997) defines both pathological reactive jealousy and symptomatic jealousy as instances of morbid jealousy, thus widening the definition of the term.

#### 1.2.2. Research into Romantic Jealousy.

To date, the research on romantic jealousy has, mainly, focused on identifying the emotions that make up jealousy and identifying individual differences in the propensity to experience jealousy. More recently attention has turned to gender differences in the experience of romantic jealousy and the development of theoretical models and frameworks. The findings to date have been somewhat inconsistent and present a confusing picture. This may be because the findings have not yet been fully integrated into an explanatory conceptual framework. The key findings will therefore be briefly discussed with particular reference to the evolutionary approach to romantic jealousy. A situational conceptualisation of romantic jealousy will be presented which, it is suggested, provides a useful framework to understand previous research findings.

Early researchers into romantic jealousy supposed that jealousy is a compound emotion. As such, research took a phenomenological perspective of jealousy and deemed it important to identify the specific feelings that characterise the individual's experience of jealousy. Investigators working

within this paradigm have, most commonly, tried to establish differences in the feelings associated with envy and jealousy. There has been considerable disagreement between researchers as to which specific blend of emotions make up jealousy. Freud (1955; 1922) proposed a mixture of grief and enmity. Other researchers have suggested jealousy is made up of, grief, anger and self-pity (Gesell, 1906); fear and rage (Davis, 1936); fear, anger and love (Arnold, 1960); hate and aggression (Klein and Riviere, 1964); fear and envy (Clanton and Smith, 1977); anger, hatred and envy (Solomon, 1976); panic, rage and expectancy (Danskepp, 1982), and anxiety, worry, fear, insecurity, suspiciousness and mistrust (Bringle, 1995).

Similarly, the empirical study of the differentiation of envy and jealousy has not yielded consistent results. Salovey and Rodin (1986) presented subjects with either envy or jealousy-provoking stimuli. They found that the subjects in both conditions reported the same angry, sad and anxious emotions, concluding that specific feelings do not differentiate envy and jealousy.

More recent research has taken a dispositional approach and focused on the individual's propensity to experience jealousy. According to this approach, individuals differ in their sensitivity to experience jealousy. The most frequent approach has been to look at associations between the propensity to experience jealousy and various other personality characteristics. Recent reviews (e.g. Mathes, 1992), cite self-esteem as the most widely examined personality variable. However, the relationship between jealousy and self-esteem is unclear. A number of studies report a negative correlation between self-esteem and jealousy (e.g. Bringle, 1981), others report no correlation (e.g. Buunk, 1984), and still others report gender differences (e.g. Buunk, 1986; Hansen, 1985). There is more consistent evidence for a positive association of jealousy with neuroticism and anxiety (Buunk, 1997; Tarrier, Beckett, Harwood and Ahmed, 1989). However, due to the methodology employed, all of these samples were self-selecting with participants' chosen without objective validation criteria (see Tarrier et al 1989). Other personal characteristics reported to be associated with jealousy include chronic suspiciousness, arousability, locus of control and a general neurotic tendency (Lazarus and Lazarus, 1994; Radecki-Buch, Buch and Jennings, 1988). The magnitude of these findings has been fairly modest and the empirical evidence surprisingly inconsistent, however some stable associations have been found between jealousy and attitudes towards exclusivity and possessiveness (Polk and Ranson, 1991; Campbell and Muncer, 1994; Daly and Wilson, 1988).

A growing body of literature is examining gender differences in romantic jealousy. Research looking at differences between males and females in the frequency and extent to which they experience jealousy have yielded inconsistent results (Pines and Friedman, 1998). Some researchers have reported that males are more jealous than females (Mathes and Severa, 1981), while others, (DeWeerth and Kalma 1993), found the reverse to be true. McIntosh (1989) reported there to be no gender differences in the frequency or extent to which males and females report feeling jealous.

Pines and Friedman (1998) attempted to address some of the inconsistencies in the literature by distinguishing five dimensions of romantic jealousy, namely: level, trigger, experience, focus, and response.

Four studies were conducted three in the USA and one in Israel, looking at gender differences on these five dimensions. It was found that both men and women spontaneously report jealousy as an issue in intimate relationships. However, women tended to focus on jealousy as a relationship issue, (i.e. jealousy is a problem in our relationship), whereas men would attribute jealousy to personal factors, (i.e. I am a jealous person). There were no observed gender differences in the level, frequency or duration of jealousy. However, differences were found in the emotional and physical experience of jealousy. Women reported more intense emotional reactions relating to pain, vulnerability, fear of loss, inferiority and emotional exhaustion, as well as reporting more anxiety symptoms. Baumeister and Sommer (1997) suggest that gender differences in self concept may account for the differences found in the experience and expression of jealousy by males and females. They suggest that connection with significant others may be more integral to the self-concept of women, accounting for the intense emotional reaction of depression, anxiety and despair when the primary relationship is perceived as being under threat (Dolan and Bishay, 1996). The status and esteem in which the larger social group holds men is suggested to be more integral to men's self-concept. Thus irritability, frustration and anger may occur as a consequence of the belief that the partner is making a fool of them (Downey et al, 1998; Dolan and Bishay, 1996; Harris and Christenfield, 1996). This would imply that the clinical presentation of males and females with problematic jealousy is likely to be different. The prediction being that women are more likely than men to present in an adult mental health setting with problems such as anxiety and depression whereas men, are more likely than women to present with problems with

anger and / or aggression, which may lead them into a forensic setting. However, the majority of the research to date has focussed on gender differences in non-clinical populations (Pines and Friedman, 1998; Buss, Larson and Westen, 1996).

The most reliably documented gender difference indicates that different aspects of the rival relationship threaten men and women. In a series of studies, Buss, Larson, Westen and Semelroth (1992) asked U.S. students which would distress them more, a partners emotional infidelity, "a deep emotional attachment", or a partners sexual infidelity, "passionate sexual intercourse", with another person. The results indicated that more men than women were upset by the possibility of sexual infidelity, whereas more women than men were upset by potential emotional infidelity. This finding has gained considerable support, with the literature consistently reporting that men are more threatened by the sexual aspect of the rival relationship, whereas women are more threatened by the potential loss of the primary relationship. (Pines and Friedman, 1998; Archer, 1996; Buunk, 1987; Bringle and Buunk, 1985; White, 1980, 1981, 1986; Buunk, 1984;). This finding was predicted by evolutionary theory (Symons, 1979).

### 1.2.3. Evolutionary Theory.

Over twenty years ago, evolutionary psychologists predicted that, psychologically, the cues that trigger sexual jealousy would be weighted differently in men and women (Symons, 1979). Empirical research supporting such predictions has led to increasing interest in the evolutionary theory of sexual jealousy (Sheets, Fredendall and Claypool, 1997; Kenrick and Trost, 1997; Buunk et al, 1996; Hupka and Bank, 1996).

According to evolutionary theory, jealousy is an innate and universal response shaped by different evolutionary forces for men and women (Trivers, 1985). Over evolutionary history, men have had to face an adaptive problem not confronted by women, namely uncertainty in their paternity of offspring. This problem is of particular importance to human males as, being one of the few species of mammals which are directly involved in the care of their offspring, paternal investment is high (Buss and Schmitt, 1993). Estimates based on existing evidence suggest that approximately 9-13% of children have putative fathers that are not their genetic fathers (Baker

and Bellis, 1995). From a man's perspective, a compromise in paternity certainty is tremendously damaging as he risks investing precious resources in a competitor's child.

Females with internal fertilisation, have no doubt concerning the genetic link to their offspring (Buss, 1995a). Ellis (1998) suggests that because males have a higher risk of misdirecting their parental investment towards unrelated offspring, they devote less time than females do to providing care to the offspring and more time competing over varied mating opportunities (White, E., 1993; Leger, 1992; Daly and Wilson, 1983). Thus, females face a different adaptive challenge, namely securing a mate who is both able and willing to provide resources, during the period of necessarily heavy investment in the offspring by the mother (Kenrick and Trost, 1997; Allgeier and Wiederman, 1994; Buss and Schmitt, 1993; Buss, 1989, 1991; Hinde, 1984).

Due to the different adaptive challenges faced by males and females, alternative reproductive strategies would be differentially advantageous for each gender. In human evolutionary history, men's reproductive success, was probably related to securing as many fertile mates as possible, whereas women's reproductive success was probably related more to selecting mates who were most able and willing to provide resources for them and their children (Ellis, 1998; Buss and Schmitt, 1993). These differences in reproductive success are suggested to have had an impact on contemporary men's versus women's mate selection strategies and have implications for the gender differences in psychological mechanisms regarding jealousy (Allgeier and Wiederman, 1994). Evolutionary theory predicts that, in species employing internal fertilisation, males are vigilant of possible sexual contact by their mates with other males; a behaviour designed to prevent cuckoldry. However, females are predicted to be more vigilant to cues of potential loss of their mate's attention and corresponding resources (Ellis, 1998; Daly and Wilson, 1994). Due to the adaptive problems faced by both males and females, it is suggested that exclusive sexual access to ones partner is likely to have been an expected benefit of mateship, particularly for men, given paternity uncertainty, but also for women if that meant reliable access to resources (Shackelford, 1997; Buss, Larsen, Westen and Semmelroth, 1992; Wilson and Daly, 1992).

The predictions of evolutionary theory have gathered much empirical evidence (Ref. Section 1.2.2). Consistent with the hypothesised gender differences in mate selection, cross-cultural research reports that men place greater value on a potential mates physical attractiveness than do

women<sup>1</sup>, whereas women generally emphasise a potential mates financial resources or earning capacity (Willis and Carlson, 1993; Feingold, 1990, 1992; Buss, 1989).

Other research has also given support to the evolutionary theory of sexual jealousy. Based on clinical cases, it has been noted that morbid jealousy over the suspected sexual infidelity of one's spouse is usually a male phenomenon (Schlanger, 1995; Prins, 1984). Cross-culturally, sexual infidelity by wives is much more often a cause for divorce than is sexual infidelity by husbands (Betzig, 1989). In addition, evidence of nearly universal male sexual constraint of females, and greater focus of male's jealousy on a mate's sexual infidelity, has been clearly documented in ethnographic records (Dolan and Bishay, 1996; Daly et al, 1982).

However, the evolutionary theory of sexual jealousy has been criticised for offering little to the understanding of some of the other aspects of jealousy. Lancaster (1985) stated that evolutionary theory fails to explain the consistent finding that women are more likely to be the victims of violence, or that wives are more likely to be killed than rivals are. Perhaps more relevant to clinicians is the criticism that this theory offers little to the understanding of individual differences observed within gender groups, such as differences in the behavioural expression of jealousy or differences observed within the same individual across time.

Although the evolutionary theory of romantic jealousy has substantial empirical support, there has been little work undertaken to integrate these findings into a comprehensive model. The following model of romantic jealousy may provide a useful framework to incorporate the research findings to date and address some of the inconsistencies and criticisms raised to further our understanding of problematic jealousy.

#### 1.2.4. An Alternative Conceptualisation of Romantic Jealousy.

Salovey (1991) proposed a situational conceptualisation of romantic jealousy. Drawing on concepts originating from evolutionary theory, Salovey (1991) emphasised the importance of the attachment system and on social comparison processes in romantic jealousy.

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<sup>1</sup> The male's emphasis on physical attractiveness is hypothesised to be selected for by natural selection. Standards of physical beauty are suggested to have evolved to correspond with youthful features and hence reproductive capacity (Buss, 1989; Alley, 1992).

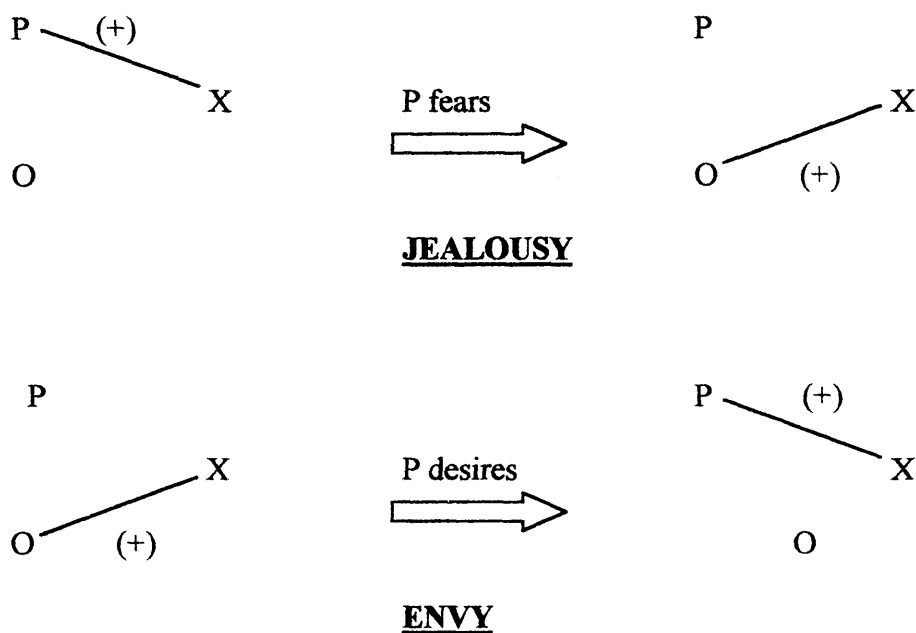


Salovey (1991) argued that the term "jealousy" could best be thought of as a label for a particular situation or predicament in which individuals find themselves in. From this perspective envy and jealousy are distinguished on the basis of situational antecedents, rather than specific blends of feelings (Hupka, 1984, 1981).

Salovey and Rodin (1989) found that both envy-provoking and jealousy-provoking situations generated similar affective responses, namely anger, sadness and some anxiety, but subjects could reliably distinguish between these two states. Based on the work of Bryson (1977), Salovey and Rodin (1989) analysed the situational antecedents of envy and jealousy using a P-O-X triad, in which P is the individual experiencing the emotional state, O is another person and X is the desired person or object. Using this analysis, "jealousy" is conceptualised as the consequence of P's belief that his or her attachment with X is threatened by real or imagined attempts by O and/or X to form an equivalent relationship.

When O has a previously established relationship with X (X can be a person or an object) and P desires to replace O in that relationship, such a situation can be considered as leading to an emotion which would be labelled as envy. (Ref. Fig.2)

**Figure 2: Situational Conceptualisation: The Differentiation of Envy and Jealousy.**



Thus jealousy and envy are discriminated on the basis of whether there is a previously established relationship (be it real or imagined) between P and X.

Empirical evidence has supported the notion that in romantic relationships, jealousy is experienced in a situation that is interpreted as posing a threat to one's intimate relationship (Marelich, 1998; Cano and O'Leary, 1997; Bringle, 1995; Sharpsteen, 1995; Radecki-Bush, Farrell and Bush, 1993).

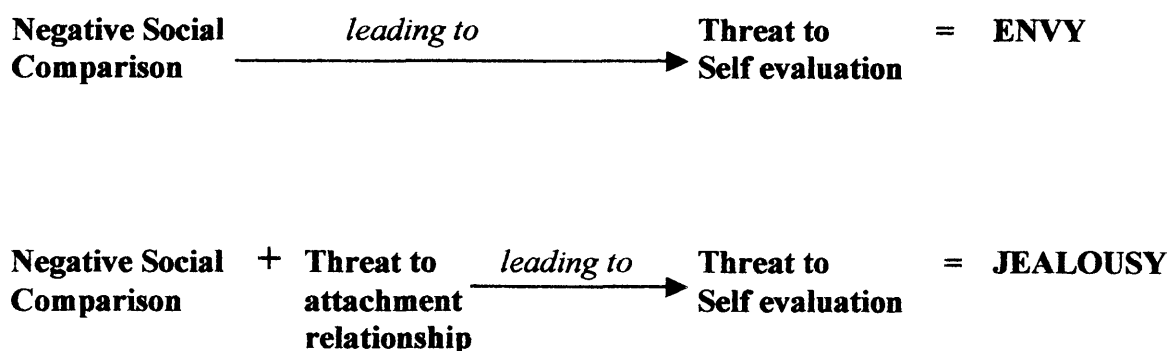
Salovey (1991) suggested that whether or not a situation is interpreted as being threatening to one's romantic relationship would be influenced by intrapersonal variables. Drawing on White's (1981) model of romantic jealousy, loss of anticipated relationship rewards (situational variable) and loss of self-esteem (intrapersonal variable) is seen as necessary to trigger jealousy (White and Mullen, 1989).

#### 1.2.5. A Model of Romantic Jealousy.

Salovey (1991) proposed that social comparison theory and attachment theory may provide a useful framework to integrate a situational approach to jealousy. The social comparison theory of self-evaluation describes the process by which individuals utilise social information to evaluate themselves (Festinger, 1954; 1950).

In envy there is a threat to self-evaluation through negative social comparison. In jealousy the same threat arises in the context of a challenged relationship with another person. According to this model, jealousy is the result of self-esteem threatening consequences, through negative social comparison in the context of a threat to an attachment relationship (Ref. Fig 3).

**Figure 3: Model of Envy and Romantic Jealousy.**



This model of romantic jealousy is essentially derived from evolutionary theory as both attachment theory and social comparison theory emphasises the evolutionary significance of these systems. However, despite the plethora of literature looking at the evolutionary explanation of sexual jealousy and substantial empirical evidence supporting the importance of evolutionary factors, this model has received scant attention. The research regarding evolutionary factors in sexual jealousy has, to date, focused predominantly on gender differences in a non-clinical population with little research looking at other aspects of jealousy from an evolutionary perspective.

#### 1.2.6. Summary

Research into the field of spousal assault and spousal homicide suggests that romantic jealousy may be a precipitating factor in many acts of abusiveness and severe acts of violence towards intimate partners. Despite this finding, research investigating romantic jealousy in offender populations is scarce, with the majority of research focussing on gender differences in non-clinical populations. With this focus in mind, the evolutionary theory of romantic jealousy has gained substantial empirical support, although it has been criticised for failing to account for individual differences within gender groups or abusive acts towards intimate partners.

Drawing on evolutionary theory, an alternative model of romantic jealousy has been proposed in which jealousy is conceptualised as negative social comparison in the context of a threat to an attachment relationship. No research has been identified that has looked at both attachment style and the process of social comparison in sexual jealousy. In addition research using a forensic population may provide valuable insight into some of the factors important in understanding problematic jealousy leading to abusive acts against intimates.

The following sections briefly reviews the literature on attachment theory and social comparison theory and suggest that individuals differ in the experience and expression of romantic jealousy according to attachment history, attachment style, and perceived social rank. Attachment theory and social comparison is discussed in relation to romantic jealousy, the development of anger, and abusiveness in intimate relationships.

### **1.3. Attachment Theory.**

#### **1.3.1. Childhood Attachment Theory.**

Drawing on evolutionary theory and with extensive reference to ethological data concerning infant-mother interaction, Bowlby (1980,1973, 1969) described his comprehensive theory of attachment as a way of conceptualising the propensity of human beings to make strong affectional bonds to significant others. According to Bowlby (1969) during the first year of life, infants develop an integrated repertoire of feelings and behaviours (an attachment system), which functions to keep attachment figures close by, shielding the infant from danger, e.g. crying, cooing, smiling, clinging and following.

Although Bowlby (1969) argued that infant attachment is biologically programmed, he also proposed that the style of attachment is influenced by environmental factors, particularly those relating to the caregiver's sensitivity and responsiveness to the infant's signals. If the attachment figure is perceived to be sufficiently accessible and available, attachment behaviours will not be exhibited unless the child is ill, tired or distressed (Pistole and Tarrent, 1993). However, when the attachment figure is perceived as being inaccessible, intense anxiety ("separation anxiety") is experienced (Bowlby 1973).

Ainsworth, Blehar, Waters and Wall (1978) developed the "Strange Situation" as an empirical method to test some of the propositions of attachment theory. Observation of infant behaviour on separation from the caregiver and subsequent reunion, led Ainsworth and her colleagues (1978) to identify three basic infant-caregiver patterns; secure; insecure-avoidant and insecure-ambivalent. Subsequent research on high risk and clinical populations of children led to the identification of a fourth attachment pattern; insecure-disorganised (e.g. Main and Solomon, 1990). The four patterns of childhood attachment are now well recognised in the literature. (Definitions of the patterns of infant attachment can be seen in Appendix 2).

Research has identified links between the parent-child relationship, in the first year of life, and subsequent classification in the strange situation. (Haft and Slade, 1989; Belsky , Rovine and Taylor, 1984; Ainsworth et al, 1978). Parental responsiveness and consistency in response to the infant is consistently found to be a key determinant of secure attachment (e.g. Holmes, 1997).

Parental responsiveness to the child during the first year of life and childhood attachment styles as defined by the behaviour of the child in the "Strange Situation" are presented in table 1.

Insecure attachment styles can be seen as strategies designed to maintain contact with rejecting or inconsistent parents (Hamilton, 1985). Thus patterns of infant attachment are seen as variations within the normal range, rather than pathological. In normative Western samples, 55-65% of infants show secure attachment patterns, 20-25% show an insecure-avoidant pattern, 10-15% show an insecure-ambivalent pattern and 10-20% show a disorganised pattern (Goldberg, 1997).

**Table 1: Childhood Attachment Styles and Parental Responsiveness.**

<b>Childhood Attachment Styles</b> (Ainsworth et al, 1978)	<b>Child's Response in "Strange Situation".</b> (Main and Solomon, 1990; Ainsworth et al, 1978; Goldberg, 1997)	<b>Parental Responsiveness.</b> (Haft and Slade, 1989; Belsky, Rovine and Taylor, 1984; Ainsworth et al, 1978)
<b>1. Secure</b>	<ul style="list-style-type: none"> <li>• Explores environment freely when caregiver available ("secure-base").</li> <li>• Show signs of distress on separation ("protest").</li> <li>• Successfully pacified on reunion with caregiver.</li> </ul>	<ul style="list-style-type: none"> <li>• Attuned to child's needs</li> <li>• Expects protest without retaliation or excessive anxiety.</li> <li>• Firm control</li> <li>• Clear consistent communication</li> <li>• Warm and affectionate</li> <li>• Appropriate assertion of power (Holmes, 1997; Main and Goldwyn, 1984)</li> </ul>
<b>2. Insecure - avoidant</b>	<ul style="list-style-type: none"> <li>• Explores the room busily</li> <li>• Shows minimal interest in caregiver.</li> <li>• Little overt distress on separation.</li> <li>• Ignores / avoids caregiver on reunion but will direct considerable anger towards the caregiver some time after (Main and Weston, 1982)</li> </ul>	<ul style="list-style-type: none"> <li>• Brusque and functional in handling</li> <li>• Unresponsive to attachment behaviour</li> <li>• Shows little physical affection.</li> <li>• Attuned to expressions of mastery, autonomy and separateness. (Holmes, 1997; Haft and Slade, 1989; Belsky et al, 1984)</li> </ul>
<b>3. Insecure - ambivalent</b>	<ul style="list-style-type: none"> <li>• Minimal exploration of the room</li> <li>• Clingy to caregiver</li> <li>• Extreme distress on separation.</li> <li>• Refuses to be pacified on reunion - simultaneously seeks and resists contact.</li> </ul>	<ul style="list-style-type: none"> <li>• Less attuned to child's needs</li> <li>• Little reciprocal interaction.</li> <li>• Inconsistently responsive to attachment behaviour</li> <li>• Inconsistent acceptance and rejection. (Haft and Slade 1989; Belsky et al, 1984)</li> </ul>
<b>4. Insecure-dismissing</b>	<ul style="list-style-type: none"> <li>• Disorganised / disorientated behaviour in presence of caregiver.</li> <li>• No coherent response to separation or reunion, e.g. "trance-like" freezing, collapsing to the floor, anomalous postures.</li> <li>• Fearful / confused with respect to caregiver.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of / inconsistent response to child's attachment needs.</li> <li>• Different forms of psychopathology / unresolved mourning.</li> <li>• Neglect / abuse of child? (Schuengel et al, 1999; Goldberg, 1997; Carlson et al, 1989)</li> </ul>

### 1.3.2. Internal Working Models.

Bowlby (1980, 1973, 1969) claimed that infants and children construct internal working models based on their experience of their earliest attachments (Kesner and McKenry, 1998). Internal working models are theorised to contain core beliefs about the self, others and attachment relationships. The internal working model is composed of three elements; beliefs about the extent to which the self is worthy of love, care and protection, beliefs as to whether that attachment figure can be relied upon to be caring and responsive, and strategies for regulating emotional distress (Mikulincer, Florian and Tolmacz, 1990; Main, Kaplan and Cassidy, 1985).

These structures provide a framework for the cognitive and affective processing of perceptions, events and relationships, which underlie and drive subsequent attachment behaviour (Klohnen and Bera, 1998). Research indicates that the development of internal working models about the self and others can influence later development, including the development of psychopathology (Jones, 1996).

Experiences such as witnessing family violence at home, childhood sexual, physical and emotional abuse and childhood neglect have been well documented as being associated with various adjustment difficulties. Associated difficulties include problems in subsequent relationships, including intimate violence (Goodyear-Smith and Laidlow, 1999; Sorenson et al, 1996); psychiatric difficulties (Stalker and Davies, 1998); personality disorders (Brennan and Shaver, 1998; Sperling and Berman, 1991; Sheldon and West, 1990) and general violent / offending behaviour (Goodyear-Smith and Laidlow, 1999).

Recently there have been a number of studies, which have examined mediating variables between childhood trauma and adversity and later adult psychological adjustment (e.g. Runtz and Schallow, 1997; Conte and Schuerman, 1987). One area that has received research attention is interpersonal relationships as a mediating variable (Runtz and Schallow, 1997). It has been argued that because childhood trauma and adversity occurs within the context of a relationship, it can cause a disruption in the normal process of learning to trust, act autonomously and form stable secure relationships (Elliott, 1994). Thus, such childhood events and the development of later difficulties may best be understood by examining their long term effects on attachment relationships (Dutton, 1999; Lyons-Ruth, 1996).

### 1.3.3. Adult Attachment Theory.

Although much of the early work on attachment theory focused on infant-parent relationships, Bowlby (1979) proposed that the attachment system affects human beings, "from the cradle to the grave" (pp.129). He suggested that internal working models, are carried forward to effect the creation of new relationships. (Main, Kaplan and Cassidy, 1985; Lewis, Feiring, McGuffog and Jaskir, 1984)

Despite the "life-span" approach originally adopted by Bowlby (see Bowlby, 1980,1973, 1969), it was not until Hazan and Shaver (1987) demonstrated that it was possible to use a self-report questionnaire to measure adult attachment styles, that the research in this area flourished. Since this time a steady stream of variants and extensions to their questionnaire have been proposed (Brennan, Clark and Shaver, 1998).

The following section will briefly review some of the literature relating to the self-report measurement of adult attachment styles, as a means of clarifying the current conceptualisation of attachment dimensions. The literature on romantic love as an attachment will then be discussed with particular attention to the developmental origins of anger within intimate relationships and how this may relate to jealousy and abusive acts towards intimates in adult relationships.

### 1.3.4. Measurement of Attachment Style

There are two main methods of measuring adult attachment styles stemming from two streams of adult attachment research; narrative measures (e.g. Adult Attachment Interview; George, Kaplan and Main, 1985) and self report methods (e.g. Relationship Questionnaire, Bartholomew and Horowitz, 1991). Research that has used narrative methods has focussed on adult's retrospective descriptions of their own childhood relationships with their parents. Self-report measures are designed to examine current attachment relationships with peers and / or romantic partners for both adolescents and adults.

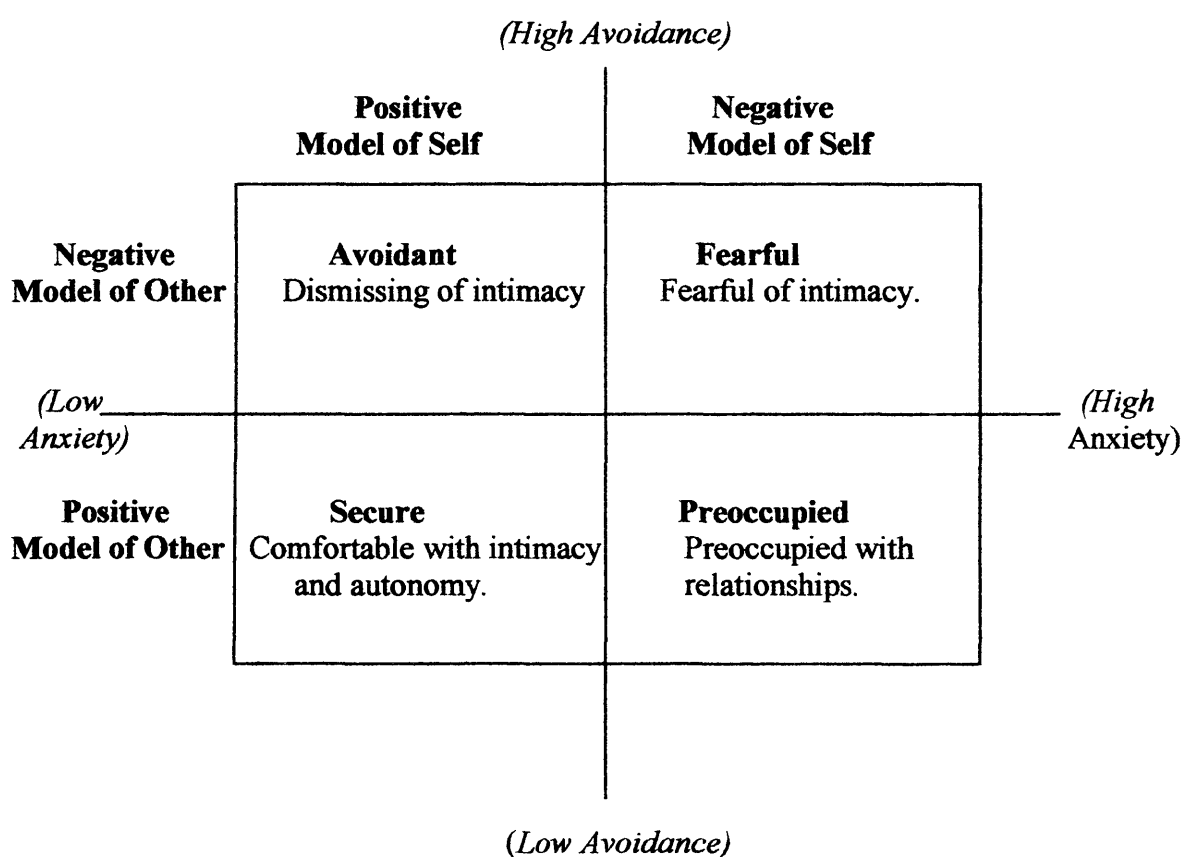
Within social psychology, Hazan and Shaver's (1987) seminal paper examined the links between romantic love and attachment style. They developed a three-category adult attachment self-report measure, namely the Romantic Attachment Questionnaire (RAQ), translating Ainsworth's three child attachment styles into three adult attachment styles. (Definitions of these three attachment styles can be seen in Appendix 3). They found theoretically expected differences in beliefs about



important intimate relationships on the basis of attachment style, which were consistent with the child attachment research (Levy and Davis, 1998; Kobak and Sceery, 1998; Feeney and Noller, 1990; Pistole, 1989).

Bartholomew (1990) proposed a four-category measure of attachment. He suggested that, underlying the four attachment "types" are two dimensions, corresponding to the internal working model of the self and other (Bowlby, 1969). Bartholomew (1990) proposed that the internal working models can be dichotomised as either positive or negative. By combining each internal working model of self with each internal working model of other, four adult attachment categories are hypothesised. Bartholomew and Horowitz (1991) developed the Relationship Questionnaire (RQ) to assess individuals across the four attachment styles. (Definitions of each of the adult attachment styles can be seen in Appendix 4). The four attachment categories and their relationship to the internal working models of self and other are shown in Fig. 4.

**Figure 4: Bartholomew (1990) Four- Category Model of Attachment.**



More recently, several authors have argued against "type" descriptions arguing for a dimensional model of attachment. (Fraley and Waller 1998; Guerrero and Burgoon, 1996; Bartholomew and Horowitz, 1991).

Brennan, Clark and Shaver (1998) using principal components analysis of the 60 sub-scales reported in the adult attachment literature, found two higher-order factors underlying the measure. They named these two uncorrelated factors, anxiety and avoidance (Ref. Fig. 4). Bartholomew and Shaver (1998) report that the model of self is associated with the degree of anxiety experienced about the approval of others in significant relationships and the other model is associated with the tendency to seek out or avoid closeness in relationships. This allows for the dimensions of anxiety and avoidance to map onto the conceptualisation of internal working models of self and other. (Brennan et al 1998; Bartholomew and Horowitz, 1991). Brennan, Clark and Shaver (1998) developed the Experiences in Close Relationships (ECR) questionnaire, which measures the degree of attachment avoidance and anxiety, from which an individual's attachment style can be calculated. The attachment style classifications of the self-report measures are presented in table 2.

**Table 2. Classification of Attachment Styles by Self- Report Attachment Measures.**

<b><u>Childhood Attachment Styles.</u></b>	<b><u>Adult Attachment Styles</u></b>		
	<b><u>Romantic Attachment Questionnaire</u></b> (Hazan and Shaver, 1987)	<b><u>Relationship Questionnaire</u></b> (Bartholomew and Horowitz 1991)	<b><u>Experiences in Close Relationships Questionnaire.</u></b> (Brennan, Clark and Shaver, 1998)
	Categorical Measure	Categorical Measure	Dimensional Measure
<b>Secure</b> (Ainsworth et al, 1978)	Secure	Secure	Secure
<b>Insecure - avoidant</b> (Ainsworth et al, 1978)	Avoidant	Dismissive-avoidant	Avoidant
<b>Insecure - ambivalent</b> (Ainsworth et al, 1978)	Preoccupied	Preoccupied	Preoccupied
<b>Insecure - dismissing</b> (Main and Solomon 1990)		Dismissive-fearful	Fearful

#### 1.3.5. Romantic Love as an Attachment Process.

Certain relationships maintained by adults appear to possess the properties of attachment bonds. In particular, research indicates that enduring romantic or sexual relationships are the most important in adult life (Sharpsteen and Kirkpatrick, 1997; Crittenden 1997).

Hazan and Shaver (1987) first conceptualised adult romantic relationships as an attachment process. They proposed that attachment theory could serve as the basis for a theory of romantic relationships that can account for individual differences in relating to romantic partners.

Hazan and Shaver (1987) demonstrated that the experiences of adults in intimate relationships differed according to their attachment style. Individuals with secure attachment styles described more relationship satisfaction, higher levels of intimacy, trust and commitment. Individuals with anxious-ambivalent (pre-occupied) style experienced love as an obsession. Their relationships were characterised by emotional highs and lows, extreme sexual attraction and jealousy. They reported falling in love frequently but seldom found what they called "real" love. Individuals with an insecure-avoidant style were characterised by fear of intimacy, emotional highs and lows and jealousy. They reported believing that "real" love was rare and that romantic love seldom lasts. Hazan and Shaver (1987) found theoretically expected differences across the adult attachment styles in terms of recall of childhood attachment experiences, beliefs about the availability of others and their own sense of internalised self worth.

These findings generated a flurry of empirical research, applying attachment theory to various aspects on intimate / romantic relationships. As a result individual differences in adult attachment styles have been reported to predict beliefs and attitudes about romantic love (Collins and Read, 1990; Hazan and Shaver, 1987), relationships satisfaction and commitment (Feeney and Noller, 1990; Simpson, 1990) and relationship stability over time (Kirkpatrick and Davis, 1994). In addition, it has been found that couple-pairings are influenced by their attachment style (Senchak and Leonard, 1992; Collins and Read, 1990; Simpson, 1990).

### 1.3.6. Attachment Theory and Intimacy Anger.

Much of the early focus on Bowlby and Ainsworth's work was on what has been termed attachment anger or attachment rage. Bowlby (1973, 1969) and Ainsworth (1978) indicated that when attachment needs are activated and not satisfied, angry behaviour is observed in the infant e.g. crying loudly, shaking the cot, looking eagerly etc. Such actions serve the function of trying to produce the return of the attachment figure (Mayseless, 1991).

Main and Weston (1982) noted that insecurely attached children reacted with anger and outbursts of aggression upon the immediate return of the caregiver or some time afterwards. These children have learnt that their attachment needs are responded to inconsistently and are therefore anxious about the success of protest behaviours at regaining their attachment figures. Mayseless (1991) contends that the functional anger that serves to support the secure relationship becomes dysfunctional in insecure relationships. The implication is that insecurely attached infants somehow incorporate anger into their terror at being abandoned.

Thus attachment theory suggests that rage in response to the perception of separation or abandonment may have their origins in early parent-child relationships. Chronic childhood frustration of attachment needs may lead to adult proneness to react with extreme anger (intimacy anger) when such attachment cues are activated. Thus a violent outburst, may be a form of protest behaviour triggered by perceived threats of separation or abandonment by the attachment figure. It would therefore be predicted that there would be theoretically expected differences across the attachment styles in the experience and expression of anger within intimate relationships.

According to the four-category model of attachment (Bartholomew, 1990), the secure attachment style is defined in terms of a positive self-model and a positive other-model; secure individuals are comfortable with intimacy and autonomy. Therefore this patterns is not expected to be associated with intimacy anger and abusiveness in relationships. The avoidant attachment style is defined in terms of a positive self-model and a negative other- model. Avoidant individuals maintain a positive self-model by emotionally distancing themselves from others and downplaying the importance of their attachment needs and are therefore unlikely to be especially prone to intimacy anger and abusiveness in relationships (Dutton et al, 1994).

The two attachment styles defined in terms of a negative self-model (preoccupied and fearful) are, in contrast, chronically anxious about abandonment and rejection in close relationships (Downey et al, 1998). Their high dependency on others to meet their needs and their own feelings of unworthiness creates anxiety about rejection. In addition, the fearful attachment pattern is associated with a pervasive interpersonal distrust. This strong and unresolvable approach-avoidance may lead to chronic frustration needs (Bartholomew, 1990). Therefore, the two attachment styles defined in terms of high anxiety (preoccupied and fearful) are expected to be associated with high levels of intimacy anger and abusiveness in intimate relationships.

Research looking at male violent offenders has consistently reported aggression towards females as being associated with intimacy deficiencies and a marked degree of loneliness, (Marshall and Hambley, 1996; Bumby and Marshall, 1994; Check, Perlman, and Malamuth, 1985), related to the quality of childhood attachments (Garlick, Marshall and Thornton, 1996; Marshall and Mazzucco, 1995). Despite these findings researchers have only recently used attachment theory to account for abusive behaviour in adult intimate relationships.

Studies looking at violent males entering marital violence treatment programs report that violent men are reported to be more anxious about abandonment and score significantly higher on scales measuring preoccupied and fearful attachment styles (Holtzworth- Munroe, Stuart and Hutchinson, 1997; Dutton, Saunders and Starzomski ,1994).

Kesner and Mckenry (1998) interviewed 149 heterosexual couples, from the general population, regarding their childhood attachment experiences, violence in the family of origin, current adult attachment status and relationship history, including current or previous violence in intimate relationships. They reported significant correlations between attachment history and adult attachment style and found that violent men were more likely to be insecurely attached compared to non-violent men, concluding that attachment factors were unique predictors of male violence towards intimate partners. However, violent men in general are reported to be more likely to be insecurely attached and, to date there is little evidence to suggest that different types of violent offenders can be differentiated on the basis of attachment style (Ward, Hudson and Marshall, 1996).

Pistole and Tarrent (1993), examined the relationship between self-report attachment styles and hostility in a 62 males convicted of violence against their partner. In contrast to previous findings, they reported that all four attachment styles were represented in proportions similar to non-violent samples. They concluded that violence occurs in intimate relationships regardless of the males perceived attachment style and the effects of threats to attachment on couple violence is equivalent across the attachment styles. This study has not gone unchallenged, with several authors highlighting its limitations, particularly the absence of any non-violent control group (Roberts and Noller, 1998). In addition, despite the widespread acknowledgement of under-reporting as a confounding variable in research looking at male violence towards female partners (Kane, Staiger and Ricciardelli, 2000; Archer, 1999; Surgarman and Hotaling, 1997), this study did not incorporate any measure of social desirability, an issue which is arguably more salient in offender populations.

Previous research investigating the role of attachment styles in male violence towards intimate partners has relied on self-report measures that provide categorical data. It is suggested that the use of continuous measures may provide more information with regards to the degree of attachment anxiety and attachment avoidance experienced by males who are violent towards their partners and as such may be able to differentiate between domestically violent and extra-domestically violent men.

### 1.3.7. The Attachment System and the Jealousy Complex.

The threat of separation or loss of an attachment figure can result from a variety of factors. Studies looking at the physical and emotional distancing of couples found theoretically expected differences across the attachment styles in how individuals experienced the separation and the coping strategies they employed to deal with the distress of separation (Rholes, Simpson and Crich-Stevens, 1998; Feeney, 1998; Cafferty, Davis, Medway, O'Hearn and Chappell, 1994; Simpson, 1990; Mikulincer, Florin, and Tolmacz, 1990)

Research on romantic jealousy is consistent with the idea that jealousy is, at least in part, the product of threats to the attachment system. Both the attachment system and the jealousy complex appear to share the common function of the maintenance of relationships, and are therefore both

likely to be triggered by events that threaten the relationship or one's ability to maintain it (Sharpsteen and Kirkpatrick, 1997; Mathes, Adams and Davis, 1985).

Despite an increasing interest by researchers in the fields of both romantic jealousy and adult attachment theory, Sharpsteen and Kirkpatrick (1997) note that these two fields have yet to be integrated.

In a study conducted by Sharpsteen and Kirkpatrick (1997), significant differences were found between the experience and expression of romantic jealousy, which paralleled individual differences in attachment behaviour. They reported that jealousy episodes closely resembled the protest phase of separation and the emotional responses to jealousy were predictable by attachment style. Thus, it could be argued that the thoughts feelings and behaviours that make up the jealousy complex are, at least in part, the same thoughts, feelings and behaviours that occur when the attachment system is activated by the perceived threat to the attachment bond. The intensity of emotions felt when jealous, were attributed to differences in internal working models of the self and others which guide the interpretation of stressful events. Individuals with insecure attachments experience jealousy more intensely, with those with a pre-occupied attachment style being more jealous than those with an avoidant style (Vincze and Dull, 1998; Buunk, 1997; Sharpsteen and Kirkpatrick, 1997).

One difficulty with previous research has been that due to the measures used, jealousy was not studied with respect to fearful attachment style. Fearful attachment style, like the preoccupied attachment style, is characterised by high levels of anxiety about abandonment and rejection and are likely to become jealous in situations where they perceive the relationship to be in threat.

#### 1.3.8. Summary

The attachment system and the jealousy complex can be seen to share a common function, namely that of protecting the attachment relationship. Early research findings suggest theoretically expected differences in the experience and expression of romantic jealousy across the attachment dimensions.

Research into the developmental origin of anger and aggression which results when the attachment relationship is under threat, suggests that differences in the experience of anger will be dependent, in part, on attachment style.

The following section will briefly describe Social Comparison theory, with a particular focus on human hierarchies and how this may relate to jealousy and violence within intimate relationships. Social comparison in adolescence will be discussed with a particular focus on the developmental processes occurring at this stage, and how they may relate to the emergence of a violent dynamic in relationships.

#### **1.4. Social Comparison Theory.**

##### **1.4.1. Social Comparison and Social Rank.**

The social comparison theory of self-evaluation describes the process by which individuals utilise social information to evaluate their own abilities and opinions (Festinger, 1954; 1950). The fundamental proposition of social comparison theory is that human beings need to evaluate themselves, in relation to others, in order to survive effectively. Traditionally social comparison theory attempted to understand situations in which individuals deliberately seek comparison as a source of self-knowledge. However, more recent research has looked at situations in which comparison may not actively be sought but occurs nonetheless, e.g. as in the case of a sexual rival (Pines and Friedman, 1997).

The estimation of one's relative social "rank" is based on social comparison judgements such as; inferior-superior, weaker-stronger etc. (Pratto et al, 1994; Gilbert, 1992; Furnham and Brewin, 1988). Gilbert (1995, 1992) outlines the evolutionary root of social comparison, suggesting that the ability to compare oneself with others is phylogenetically very old and biologically very powerful. However, the importance of social comparison judgements about one's relative rank in social relating have largely been ignored in the literature (Gilbert, 1995).



#### 1.4.2. The Evolution of Social Hierarchies.

It is suggested that ranking behaviour, leading to dominance hierarchies, have evolved from particular breeding strategies that are still seen in many species, including primates (Gilbert, 1997). Here, ranking behaviour results in the ownership of a breeding territory thus decreasing paternity uncertainty. Contests for the territory involves particular types of ritualistic displays to advertise fighting ability and preparedness to fight. Such displays are sometimes referred to as "bluff displays", because they rarely result in serious or prolonged aggression. If the animal evaluates that it will lose (i.e. is of a lower rank) then it can depart from the scene, or display submissive behaviours, avoiding a prolonged and dangerous fight. It is important to get judgements of relative rank correct not only to avoid serious injury, but also to ensure that the animal is not so inhibited that it does not contest situations that it could win.

The tactics and signals used to advertise fighting ability, such as relative size, posture and ritual agonistic behaviour is referred to in the literature as *Resource Holding Potential* - RHP (Gilbert, 1995; 1992). There is a basic social comparison process which takes place in comparing one's own RHP to that of a competitors in the decision as to whether to make a challenge (Krebs and Davies, 1993). Such an evaluation will also be influenced by previous success, weapons, allies and other factors that increase chances of a successful challenge (Gilbert, Price and Allan, 1995). The social comparison process of individual estimates of RHP serves to rank the population and reduce the frequency of fighting, i.e. some individuals will estimate that they have a high RHP and will challenge for and defend resources, while others will estimate that they have a low(er) RHP and will reduce their challenging behaviour.

#### 1.4.3. Human Hierarchies.

Aggression and intimidation is one strategy to social and reproductive success but there are other non-aggressive strategies that can be employed to gain status. In contrast to animals, human rankings and hierarchies are determined more by demonstrating attractive qualities than they are on displays of aggression and intimidation (Allan and Gilbert, 1997; Releigh, McGuire, Brammer, Pollock and Yuwieler, 1991; de Waal, 1989). One of the reasons for this is that very few male primates achieve high- ranking positions without allies, making rank status (and thus

reproductive success) crucially dependent on the alliances an animal makes (Chapais, 1992; Argyle, 1991; Gilbert, 1989).

In humans, therefore, social status is usually gained in the context of co-operation and affiliation (Beaumeister and O'Leary, 1995; Jensen-Campbell, Graziano and West, 1995; Argyle, 1987). Barkow (1989, 1975) refers to this as "gaining prestige" and was one of the first to recognise the importance of the evolved shift from status gained via aggression to status gained via attractiveness. In order to gain status and acceptance in a group or in a relationship, one has to display qualities that others will find attractive, e.g. intelligence, artistic talents, co-operation, altruism etc. Individuals that have such qualities receive more positive social attention and are actively sought out as mates and allies, i.e. status is bestowed (Gilbert, 1997; Kemper, 1990; Leary and Kowalski, 1990; Chance, 1988, 1984). The ability to elicit positive attention and social rewards is referred to as *Social Attention Holding Power-SAHP* (Gilbert, Price and Allan, 1995; Gilbert, 1993, 1992, 1989).

Thus humans have two main pathways in social ranking; the first is based on threat and aggressive dominance (RHP), the second is based on attractiveness (SAHP). Gilbert (1992) contrasted the strategies of RHP and SAHP (Ref. Fig. 5) and suggested that the perception of oneself as inferior to others in terms of SAHP may lead a person to use the more primitive RHP strategy (Gilbert, 1997; 1992).

**Figure 5: Strategies for gaining rank and status (Gilbert, 1997,1992)****AGGRESSION  
(RHP)**

Coercive  
Threaten  
Authoritarian

To be obeyed  
To be reckoned with  
To be submitted to  
To inhibit  
To stimulate fear in others

**ATTRACTIVENESS  
(SAHP)**

Show talent  
Show role competence  
Affiliative

To be valued  
To be chosen  
To be freely given  
To inspire, attract  
To stimulate positive affect in others

**If self is construed as losing / inferior.**

*(Possible defensive responses)*

Shame  
Revenge  
Defeated  
Depression  
Social anxiety  
Hostile resentment  
Self-criticism (internal attack)

Scheff (1988) suggested that with the desire to be seen as attractive to others comes an awareness that we are also the target of others comparisons. The fear of being compared unfavourably to others is likely to be greater if one perceives one's own SAHP (i.e. rank status) to be low (Gilbert, Price and Allan, 1995). Therefore, it is suggested that, the aggressive behaviour of a jealous male can be interpreted as occurring because the individual perceives himself to be "low rank" and possessing little "holding power" over his mate against a rival.

The study of domestic violence has looked extensively at the role of stressful life events precipitating violence within intimate relationships (Barnett et al, 1991; Fishbein, 1990; Straus, 1980). Consistent with social comparison theory, factors that are found to moderate between the stressor event and domestic violence are those that threaten the traditional male role and signify a

threat to social status (and therefore SAHP) such as unemployment, poverty, separation etc. (Emery and Laumann-Billings, 1998; Fishbein, 1990; Leonard and Jacob, 1988).

Tactics for gaining and maintaining rank status are complex in humans. However the consequence of losing social status (rank) or being allocated a lower rank than one wishes (involuntary subordination) still involves primitive social defensive behaviours (Gilbert, 1997). The most common affective response relating to losses of social standing reported in the literature, is that of shame (Gilbert, Allan and Goss, 1996; Dutton et al, 1995; Buss, 1995b; Daly and Wilson, 1994; Lansky, 1992).

Gilbert (1997) argues that the evolutionary root of shame is, "to alert the self and others to detrimental changes in social status" (pp. 114). Shame is associated with feelings of loss of confidence, internal inhibition and desires to hide or to escape (Dixon, Gilbert, Huber, Gilbert and Van der Hoek, 1996; Keltner, 1995; Lewis, 1987, 1986; Harper, 1985). There are also suggestions in the theoretical and clinical literature that shame is also associated with anger arousal (Tangney, Wagner, Fletcher and Gramzow, 1996, 1992; Tangney, 1990).

When shamed, a person's focal concern is with the entire self and is taken as a reflection of a global and enduring defect of the self. Lewis (1971) and Scheff (1987) referred to this as a sense of "humiliated fury" directed towards the self and the real, or imagined, disapproving other. Perhaps unsurprisingly, shame has been reported to be associated with a desire to punish, a desire to retaliate, hostility and aggression (Tangney, Wagner, Fletcher and Gramzow, 1996, 1992; Tangney, 1990; Kinston, 1987; Nathanson, 1987; Wicker, Payne and Morgan, 1983). Such a response can be viewed as a defensive manoeuvre to deal with attacks on SAHP, in order to "save face" or to prevent further attacks on status (Dutton et al, 1995; Daly and Wilson, 1994; Lewis, 1971). Baumeister and Sommer (1997) suggest that "face saving" in the context of the wider social group may be relatively more important for males, reporting that the status and esteem in which men are held by the larger social group is more integral in their self-concept (Gilbert, 1997).

In the case of sexual jealousy, it is suggested that the anticipation of being unfavourably compared to a potential rival, alerts the individual not only to a threat to the attachment

relationship, but also an associated attack on their rank status (SAHP). Such a threat alerts the individual to the potential to be disgraced, ridiculed and shamed. The potential of this attack occurring is suggested to be greater if one perceives oneself to be of "low rank" (low SAHP). This would suggest that it is the consequence of being compared unfavourably to a rival in the mind of one's partner, that would lead to being shamed and damage to one's public and private image, thus it is the partner who is the potential shamer. At least two empirical studies support this contention. Mathes and Verstrete (1993) found that the jealous individual's anger and blame were focused more on the partner than on the rival, this finding was supported by Paul, Foss and Galloway, 1993. The central object of jealousy is, therefore, the partner (shamer), with the rival usually occupying a subordinate role. (Dutton et al, 1996). Downey, Freitas, Michaelis and Khouri (1998) suggested that men are more likely than women to perceive rejection in events that threaten the loss of societal respect or in events that challenge their confidence that others respect them (e.g. if their partners make them look foolish). Physical abuse of an intimate female can therefore be seen as an attempt to regain or maintain a faltering sense of one's rank status by exerting control over a partner, preventing contact with potential rivals and maintaining the respect of one's social group (Goodyear-Smith and Laidlaw, 1999; Rhodes and Baranoff-McKenzie, 1998; Downey and Feldman, 1996).

#### 1.4.4. Social Comparison in Adolescence.

Tangney, Wagner and Marschall (1993) compared the shame experiences of 9-11 years olds with an adult sample. Two interesting sets of findings were identified. The first involved the interpersonal contexts within which shame was experienced. Adults were more likely to experience shame in relation to romantic and/or sexual relationships, whereas children were more likely to experience shame in relation to disobedience vis-à-vis an authority figure, such as a parent or teacher. The second set of findings related to the degree to which each group was interpersonally focussed. The adult sample were significantly more likely to be concerned about the evaluations of others than the child sample. Tangney, Wagner and Marschall (1993) suggested that one possible explanation for this is that there are significant developmental changes in the contexts eliciting shame between middle childhood and adulthood (i.e. adolescence).

Adolescence has long been recognised in the literature as an important developmental stage signifying the transition from childhood to adulthood (Furman and Wehner, 1997). The developmental tasks accompanying this stage are numerous, reflecting increased dependence and autonomy from one's caregivers and establishing attachment relationships with peers. Allan and Houser (1996) found that successfully coping with the developmental task of establishing autonomy at 14 years of age predicted coherence and security in adults states of mind regarding future attachments, up to 11 years later.

Across the teenage years, attachment relationships and perceived closeness shifts from parents to peers, with the peer group becoming ever more important (Laursen and Williams, 1997; Furman and Wehner, 1997). During the teenage years a number of developmental changes occur within peer group relationships. For example, peer pressure (the importance attached to the views of others and the need to conform to them) appears fairly weak at the onset of adolescence, but peaks during mid-adolescence (14-16), before again deteriorating in late adolescence (Lang, 1994; Brown et al, 1986; Berndt, 1979). Elkind and Bowen (1979) first recognised the increased consciousness that one exists in the minds of others during adolescence, referring to the concept of the "imaginary audience" to illustrate the increased self-consciousness that is apparent at this stage of development. The developmental trend of the relative importance of the views of ones peers seems to mirror the emotional investment directed at peers, with increasing levels of intimacy and self-disclosure occurring during mid-adolescence (Buhrmester, 1990; Furman, 1989; Berndt and Perry, 1986). However, this is complicated by the finding that a need for intimacy to others is accompanied by a period of high self-consciousness concerning the opinions and reactions of others. Evidence in support of this tension is provided by the finding that the highest insecurity in friendships, fear of rejection and vulnerability to jealousy occurs at about 14-15 years of age (Feiring, 1996; Lang, 1994). It is also at this time that the potential for a violent dynamic in adolescent cross gender relationships increases significantly (Wolfe and Wekerle, 1997), possibly as a function of increased jealousy and conflict (Feiring 1996).

Therefore, it would seem that social comparison appears to be an important process for teenagers. The period of adolescence is a good example of a time during which there are disproportionately

few explicit standards to guide this transition. Thus comparison with the peer group becomes an essential tool to alleviate uncertainty (Seltzer, 1989).

The small amount of research that has examined this issue suggests that a "group dominance hierarchy" exists within teenage peer-groups, in which individuals negotiate and judge their own position within the rank. (Seltzer, 1989; Tobin, Boxer and Peterson, 1983).

Lang (1994) in a study of four hundred and thirty six teenagers, found that mid-adolescent (14-15 years) males, but not females, were the most sensitive to peer induced shame, which he associated with the age at which they become particularly rank sensitive, and social comparison to peers peaks. Consistent with evolutionary theory, it would appear that there are marked gender differences in the characteristics that are valued and deemed to be attractive by the group. Dong et al (1996) found that social status in adolescence was mainly correlated with intelligence and physical attractiveness. However, for boys, social rank was also dependent on their peer's expectations of their future earning power and perceptions of their masculinity. Female's social status depended upon ratings of their physical attractiveness and femininity. Ruby (1998) reported that high achievement and academic competence, though personally valued by girls, did not contribute to social status among peers, and in some cases high academic achievement was identified as causing girls to be rejected by their peer group. This was not true for boys.

Lang (1994) suggested that the stronger relationship for peer induced shame proneness in mid-adolescence, may partly be explained by the wide variations in pubertal maturation in this age group of males. This may result in an increased sensitivity to size, strength and status. There is now growing evidence that suggests that for boys' criteria such as physical size, pubertal development and athletic ability are indeed important rank issues. Bulcroft (1991) found that the physical changes that occurred during puberty that signify dominance (e.g. weight, height and muscle growth, change in voice and development of facial hair) significantly increased peer status (Ruby, 1998). Consistent with the concept of SAHP, high status boys are perceived as being more attractive, and are more likely to date extensively (Feldman et al, 1995, Bulcroft, 1991).

Despite possessing physical characteristics reflective of physical dominance and fighting ability, recent research indicates that males who have a high rank status are actually less likely to be

physically aggressive. Schaal, Tremblay, Soussignan and Susman (1996) found that male pubertal testosterone was associated with high social dominance and low physical aggression. Both concurrent and longitudinal analysis indicated that testosterone levels were positively associated with social success rather than physical aggression. In contrast boys with low levels of pubertal testosterone had a history of increased physical aggression, and were unpopular with their peers, perhaps reflecting a need for the use of the more primitive method of protecting rank status.

#### 1.4.5. Summary

Social comparison theory suggests that the ability to make judgements about one's relative social rank has evolved from breeding strategies involving dominance hierarchies. Human hierarchies are suggested to be determined more by the demonstration of attractive qualities than on intimidation and aggression, thus the ability to make alliances is crucially important to rank status. It has been suggested that individuals may be more likely to use the primitive strategies of aggression and intimidation if they perceive themselves to be inferior to others in terms of possessing qualities that elicit positive attention and social rewards. Detrimental changes in social standing are suggested to be shame inducing. It has been suggested that the threat of being compared unfavourably to a sexual rival by an intimate partner alerts the self to the potential for detrimental changes in social standing and shame.

The developmental stage of adolescence is characterised by the increasing importance of the peer group and increasing self-consciousness, making social comparison particularly salient at this stage. It is suggested that low rank status in adolescence may influence the use of intimidation and aggression to achieve interpersonal goals.



### **1.5. General Summary.**

This study aims to investigate romantic jealousy, conceptualised as negative social comparison in the context of a threat to an attachment relationship (Solovey, 1991), leading to abusive acts against intimates.

Both the attachment system and the jealousy complex appear to serve a common function, that of protecting and maintaining relationships, suggesting that they are inextricably linked. Social comparison theory suggests that the process of social comparison also serves a monitoring function, alerting the individual to detrimental changes in social relating and social standing. In the situation of a potential challenge to a romantic relationship, there is a risk of both individual loss and loss of the esteem and status that one is held by the wider social group.

Thus, attachment theory and social comparison theory offer a theoretical framework with which to understand individual differences in the propensity to be vigilant to the cues of rejection and abandonment and the response to such a threat. Abusive behaviour towards an intimate partner is conceptualised as a protest against threats of abandonment, an attempt to "save face" and regain sense of control.

### **1.6. Research Hypotheses.**

The aim of this study is to investigate the role of attachment and social comparison in the experience of jealousy, in a group of men convicted of violence against their partners / ex-partners. In addition, this study aims to investigate the recollection of social rank in adolescence in the development of abusiveness in intimate relationships.

#### **1.6.1 Hypothesis One**

**The first aim of this study is to investigate the relationship between jealousy and abusiveness in intimate relationships.**

*Hypothesis 1:* There will be a significant association between jealousy and anger, and jealousy and abusiveness in intimate relationships.

#### **1.6.2 Hypothesis Two**

**The second aim of the study is to investigate the role of attachment style on jealousy and abusiveness in intimate relationships.**

*Hypothesis 2a:* It is hypothesised that predominantly insecure attachment styles will be found within the group of violent men, compared with the distribution found in non-violent men.

*Hypothesis 2b:* It is hypothesised that men who are abusive in intimate relationships will report significantly higher attachment anxiety (preoccupied and fearful attachment styles) than men who are not abusive in intimate relationships.

*Hypothesis 2c:* It is hypothesised that attachment anxiety (preoccupied and fearful styles) will be associated with jealousy in intimate relationships and anger.

### 1.6.3: Hypothesis Three

**The third aim of the study is to investigate the role of social comparison on jealousy and abusiveness in intimate relationships.**

*Hypothesis 3a:* It is hypothesised that men who are abusive in intimate relationships will compare themselves more unfavourably to their peers (i.e. of "lower rank") than men who are not abusive in intimate relationships.

*Hypothesis 3b:* It is hypothesised that reports of low social comparison will be associated with higher levels of jealousy in intimate relationships and anger.

*Hypothesis 3c:* It is hypothesised that low social comparison will be associated with higher levels of internalised shame.

*Hypothesis 3d:* It is hypothesised that internalised shame will be associated with anger and abusiveness in intimate relationships.

### 1.6.4 Hypothesis Four.

**The forth aim of the study is to investigate the role of social comparison in adolescence in the development of abusiveness in intimate relationships.**

*Hypothesis 4a:* Men who are abusive in intimate relationships will report a "low rank" status in adolescence (i.e. will report themselves to have been "inferior" to their peers in terms of pubertal maturity, size, athletic ability, popularity etc.)

*Hypothesis 4b:* Reported "low rank " status in adolescence will be associated with continued low social comparison and internalised shame in adulthood.

## **2.0 Methodology**

### **2.1. Design.**

This was a cross sectional quantitative study. The study was primarily an unrelated between groups comparison of two groups of violent offenders, differentiated on the basis of convictions of violent offences against their partner / ex-partner, and a non-violent comparison group.

The independent variable was violence within romantic relationships and consisted of three levels:

1. Violence within romantic relationships ("domestically" violent)
2. Violence outside of romantic relationships ("extra- domestically" violent)
3. No violence.

The dependent variables were, sexual jealousy, attachment style, anger, abusiveness in relationships, internalised shame, social comparison in adulthood and social comparison in adolescence.

In addition to the between groups comparison, correlations of the dependent variables were made. This was essentially an investigatory study to consider the associations between these factors.

### **2.2. Participants**

#### **2.2.1. Recruitment of Participants**

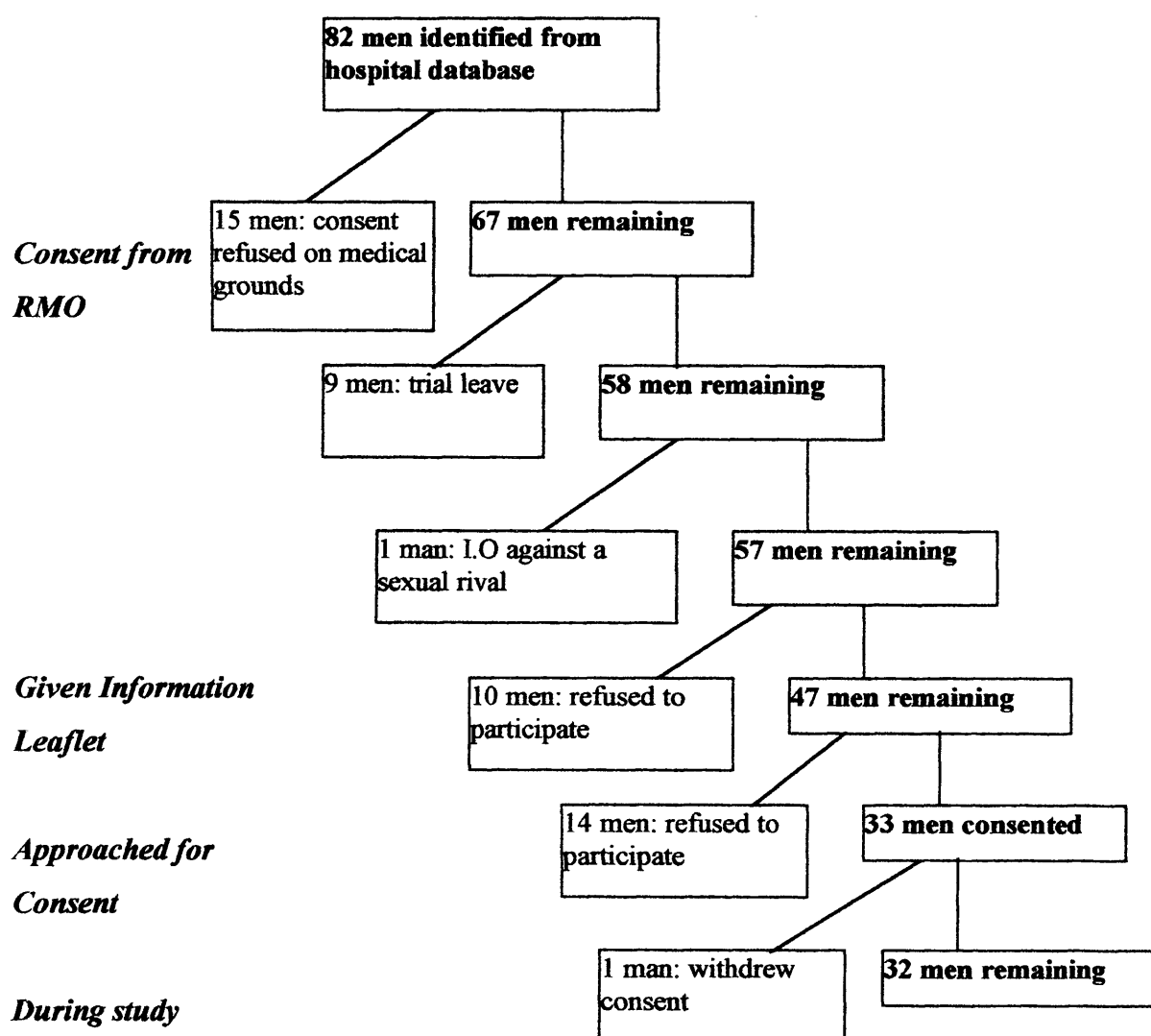
Three participant groups were recruited. Two groups were formed by male patients detained at an English High Secure Psychiatric Hospital. The patients were all detained under the Mental Health Act (1983), and in all cases a serious criminal offence had been committed. The third group was a group of "non-violent" males recruited from the general population.

In order to be included in the study, all participants had to have had at least one heterosexual romantic relationship lasting six months or more. Patient participants were excluded from the study if they were actively psychotic or if their clinical team considered that inclusion in the study would be detrimental to their mental health. All the men from the Learning Disabilities

Service within the hospital were excluded from the study. Men who had a current conviction against a sexual rival were also excluded.

Possible participants within the hospital were identified from information about relationship history held on the Hospital Information Database and 82 patients were identified as having had at least one stable (6+ months) heterosexual relationship. Of these men 31(37.8%) had a current (25 cases, 30.5%) or previous (6 cases, 7.3%) conviction of violence / sexual violence against their partner / ex-partner. Figure 6 shows the process involved in the recruitment of participants from the hospital.

**Figure 6: Recruitment of Participants from the Hospital**



The non-violent comparison group was recruited from the general population. Participants were recruited from general health care settings, with additional participants being recruited via the snowball technique (Breakwell, Hammond & Schaw, 1995). The snowball technique is a method of contacting participants who would otherwise be difficult to identify. Initially a relatively small number of participants are approached from within groups that are accessible to the researcher. These participants are given sufficient information about the inclusion criteria for the study to enable them to recruit other participants suitable for the study. Fifty-six questionnaire packs were distributed and 29 (51.8%) were returned.

### 2.2.2. Participant Information

Group one (n=16. Mean age = 41years) consisted of men detained at a High Secure Psychiatric Hospital with a current or previous conviction(s) of violence / sexual violence against their partner / ex-partner.

62.5% (10 cases) of the men included in this group had a current conviction (Index Offence) against their partner / ex-partner. Their Index offences were as follows; Grievous Bodily Harm (1 case), Wounding with Intent (1 case), Attempted Murder (2 cases), Rape and Grievous Bodily Harm (2 cases), Rape and Attempted Murder (1 case) and Murder (3 cases). Of these men 60% (6 cases) also had previous conviction(s) against their partner / ex-partner.

The remaining 37.5% (6 cases) of the men included in this group had a previous conviction against their partner / ex-partner for; Actual Bodily Harm (2 cases), Grievous Bodily Harm (2 cases) and Rape and Grievous Bodily Harm (2 cases).

93.75% (15 cases) of the men included in this group were recorded as having a history of violence within intimate relationships prior to their conviction.

Group two (n=16, Mean age = 42.7years) consisted of men who were detained for violent / sexually violent offences but had no current (Index Offence) or previous conviction against their partner / ex-partner. Their current convictions were as follows: Actual Bodily Harm (1 case), Grievous Bodily Harm (1 case), Sexual Assault (3 cases), Rape and Grievous Bodily Harm (1 case), Rape and Attempted Murder (1 case), Rape and Murder (3 cases), Attempted Murder (4 cases) and Murder (2 cases).

None of the men included in this group had a recorded history of violence within intimate relationships.

Group three (n =29, Mean age = 39.1years) consisted of men recruited from the general population. These men were selected to provide a relatively non-violent, non-criminal sample.

## **2.3. Measures**

### **2.3.1. Abusiveness within Intimate Relationships.**

It is generally recognised within the literature, that the measuring of violence within intimate relationships is problematic, due to the under-reporting of violence by perpetrators (Archer, 1999; Foshee, 1996; Morse, 1995; Harris & Cook, 1994; Arias & Johnson, 1989; Deal & Wampler, 1986; Bernard & Bernard, 1983).

Many authors have recommended that in order to overcome the problem of under-reporting in this area, research should consistently include a measure of social desirability (Kane, Staiger, & Ricciardelli, 2000; Archer, 1999; Sugarman & Hotaling, 1997; Dutton, van Ginkel & Landolt, 1996).

In this study abusiveness in intimate relationships was measured using the Conflict Tactics Scales (CTS; Straus, 1979). The short form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) was used to address the problem of the validity of self-reports of violence within intimate relationships.

The Conflict Tactics Scale (CTS; Straus, 1979) is a standardised scale designed to measure the frequency and intensity of various tactics used by couples to resolve conflicts. The CTS is a 19-item self-report measure in which the individual reports on the frequency of behaviours used in conflicts with their intimate partner over a given period (Ref. Appendix 5). The CTS has 19 descriptions of conflict tactics that range from the least severe, i.e. discussed the issue calmly, to the most severe, i.e. used a knife or a gun. These 19 items are broken down into three main sub-scales: (a) reasoning, (b) verbal aggression and (c) physical violence. In addition, the last 5 items on the physical violence sub-scale (n-r) can be used to obtain a score for a further sub-scale

namely, serious violence. In the current study, participants reported the number of times they had used each of the various tactics in the last year of their most significant romantic relationship.

The Conflict Tactics Scale was used for the following reasons;

1. The CTS has been the principle method of measuring physical aggression in intimate relationships which would allow for comparisons with previous research findings (Caetano, Schafer, Clark, Cundradi & Raspberry, 2000; Archer, 1999; Dutton, van Ginkel & Landolt, 1996).
2. Straus, Gelles & Seinmetz (1980) have published population norms for the usage of each tactic in a variety of intimate relationships.
3. Archer (1999) assessed the reliability of the CTS in a meta-analytic review. While acknowledging the general difficulty associated with under-reporting, he concluded that the CTS was the most reliable measure currently available.

The short form of the Marlowe-Crowne Social Desirability Scale was devised by Reynolds (1982) to provide a quick and easy to administer, reliable and valid measure of social desirability (Ref. Appendix 6). It is a thirteen item self-report questionnaire with a dichotomous (true / false) scale, reported to have an acceptable level of reliability and good concurrent validity with the standard versions of the Marlowe-Crowne (Crowne and Marlowe, 1960). It is one of the most commonly used social desirability measures (Saunders, 1991) and has been used with a variety of populations, including mentally disordered offenders (Egan et al, 1999).

In this study, this measure was used to assess the validity of responses to the conflict tactics scale by examining whether individuals were exaggerating the more positive aspects of themselves, as recommended by Kane, Staiger, & Ricciardelli, (2000).

The Morlowe- Crowne social desirability scale was used, as opposed to the Edwards Scale (Edwards, 1957) because it is reported to be much freer of association with psychopathology, e.g. its average correlation with the Minnesota Multiphasic Personality Inventory clinical scales is .28 (MMPI-2; Butcher, Graham, Williams & Benprath, 1990), compared with .43 for the Edwards Scale (Crowne and Marlowe, 1964). In addition Saunders (1991) reported that the Marlowe-Crowne correlates more highly with the lie scale of the MMPI than the Edwards Scale ( $r = .54$  vs.  $r = .22$ ).



### 2.3.2 Adult Attachment Styles

Adult attachment style was assessed using the Experiences in Close Relationships self-report questionnaire (ECR: Brennan et al, 1998: Ref. Appendix 7). The reliability of the ECR was assessed through inter-test agreement with the self-report Relationship Questionnaire (RQ: Bartholomew & Horowitz, 1991: Ref. Appendix 8).

The ECR is the most recently developed multi-item measure of self-reported romantic attachment styles. It was designed following a larger factor analytic study in which all of the self-report attachment measures were included (Brennan et al, 1998). The 36 items measure attachment anxiety and attachment avoidance in romantic relationships. Each item is scored on a seven point Likert rating scale, ranging from 1 = "strongly disagree", to 7 = "strongly agree" and several items are reversed scored. Mean scores for each dimension were used to calculate which of the four attachment categories, secure, preoccupied, dismissing and fearful (Bartholomew, 1990), the participant fitted.

The ECR was chosen for the following reasons;

1. It is a continuous measure of attachment, conceptualising attachment in dimensional terms. It provides both dimensional scores across the two attachment dimensions of anxiety and avoidance, and the overall attachment category. This is currently the most conceptually valid method of investigating adult attachment styles. (Bartholomew & Shaver, 1998; Fraley & Waller, 1998).
2. The ECR has been shown to have good construct validity, in particular the two attachment dimensions have been consistently found to underlie previous adult attachment measures and to account for the majority of variance within and between them.
3. Brennan, Clark & Shaver (1998) suggest that because this scale is slightly longer than previous self-report measures of adult attachment, it may circumvent some of the temptation toward biased responding aroused by simple measures that require people to say relatively directly whether or not they are securely attached.

However, there is little information on the reliability of this measure. Brennan, Clark and Shaver (1998) reported good inter-test agreement with the RQ (Bartholomew & Horowitz, 1991) in a sample of undergraduate psychology students. Sainsbury (1999 - unpublished) reported similarly significant inter-test agreement between the ECR and RQ in a sample of male personality disordered offenders. There have been no other published studies to date on its reliability with other populations and therefore, within this study reliability of the ECR was assessed through inter-test agreement with the RQ as recommended by Fraley & Waller (1998).

The RQ is a self-report instrument designed by Bartholomew & Horowitz (1991), to assess adult attachment within Bartholomew's (1990) four -category framework. Consisting of four vignettes of distinct relationship styles, each vignette represents a prototypic representation of one of the four adult attachment styles; secure, preoccupied, dismissing-avoidant and fearful-avoidant. Participants are asked to rate the extent to which each style describes them on a seven point Likert scale, ranging from 1 = "not at all like me", to 7 = "very much like me", and asked to indicate which style most accurately describes them.

The RQ has been used in several studies, which have suggested moderate to good reliability and validity (Kesner & McKenry, 1998; Ward, Hudson & Marshall, 1996; Bartholomew & Horowitz, 1991).

### 2.3.3. The Interpersonal Jealousy Scale

The Interpersonal Jealousy scale (Mathes & Severa, 1981) is a standardised measure of interpersonal jealousy within romantic relationships. Consisting of twenty-seven items rated on a nine-point Likert scale, ranging from - 4 = "absolutely false", to + 4 = "absolutely true", each item describes a situation which is potentially jealousy provoking, and asks participants to rate how likely it is that the situation would generate certain emotional responses (Ref. Appendix 9). Total scores are obtained by summing scores over the items and several items are reversed scored. Potential scores range from -112 to +112, indicating low to high levels of jealousy respectively.

The IJS is a widely used measure of jealousy within romantic relationships, and it has been used extensively within general and student populations and more recently with populations of "male

batterers" (Dutton, van Ginkel & Landolt, 1996; Dutton, Saunders & Starzomski 1994; Mathes, Adams & Davies, 1985). It has been found to have an internal consistency reliability of .92 for both men and women (Mathes, Phillips, Skowran & Dick, 1982) and a number of studies have conducted convergent, content and discriminant validity studies attesting to the validity of the instrument (Mathes, Roter & Joerger, 1982; Mathes & Severa, 1981). The IJS is recommended as a measure of jealousy within romantic relationships due to its clinical usefulness and low social desirability response bias (de Silva & Marks, 1994).

#### 2.3.4. The State-Trait Anger Expression Inventory (STAXI)

The STAXI was devised by Spielberger (1988) and is a standardised measure of several aspects of anger and anger expression. A three part measure consisting of 44 questions answered on a 4-point Likert scale, ranging from, 1 = "not at all" / "never" to, 4 = "very much so" / "almost always", the STAXI measures six aspects of anger. These are; State Anger, (the intensity of angry feelings at a particular time); Trait Anger, (individual differences in the disposition to experience anger); Anger-In (the frequency with which angry feelings are suppressed); Anger- Out, (the frequency with which an individual expresses anger towards other people or objects); Anger Expression (anger out and anger in) and Anger Control (the frequency with which anger is controlled).

Both the state and trait scores have been shown to have high internal consistency (alphas = .93 and .86 respectively [Spielberger, 1988]) and good levels of convergent and divergent validity have been demonstrated for the anger suppression, anger expression and anger control sub-scales (Bodenmann, Bodenmann & Perrez, 1993; Faquaet al 1991). Normative data is supplied for a variety of populations including clinical and non-clinical populations as well as offenders and military recruits.

This study was interested in the general experience and expression of anger and therefore the following sub-scales were used in the analysis; Trait Anger, Anger-In, Anger-Out, Anger control and Anger expression.

### 2.3.5. The Social Comparison Scale

The Social Comparison Scale (SCS) developed by Allan & Gilbert (1995) uses semantic differential methodology (Osgood, Suci & Tannenbaum, 1957), in which participants are asked to make global social comparisons of themselves in relation to others using a series of bi-polar constructs (Ref. Appendix 10). Allan & Gilbert (1995) report that global comparisons such as these appear to be generally salient for most people and after factor analysis of the scale the investigators found that three factors emerged; Factor 1 consisted of items suggested by evolutionary theory to be related to rank construct ("Rank"); Factor 2 consisted of items suggested to be judgements of fit and acceptance within a social group ("Group fit"); and Factor 3 related to items measuring social attractiveness ("Social attractiveness"). The cronbach alpha for the scale was found to be 0.91 (Goss et al, 1994)

### 2.3.6. Internalised Shame Scale

The internalised Shame Scale (Cook, 1994) is a clinical instrument that conceptualises shame as a primary, biologically based innate affect (Nathanson, 1992). The internalisation of shame is understood in terms of a developmental process in which the experience of shame becomes linked to the development of self, leading to a chronic awareness of one's own inadequacy (Kaufman, 1989).

The Internalised Shame Scale consists of 24 negatively worded "shame" items and 6 positively worded "self-esteem" items. Participants are asked to rate the frequency with which they find themselves feeling or experiencing what is described in the statement on a 5 point Likert type scale, ranging from 0 = never to 4 = almost always.

The shame score is arrived at by summing the response categories (0-4) for each of the shame items. The self-esteem items are not used to arrive at the total score (Cook, 1994). The shame score can range from 0 - 96, with a higher score indicating higher levels of internalised shame. Factor analysis indicates that 75% of the variance on this scale is accounted for by a single factor which relates to the shame items (Cook, 1994). This scale therefore appears to be a useful measure of shame.

The Internalised Shame Scale is standardised on a number of clinical and non-clinical populations with alpha reliability coefficients of .95 and .96 respectively indicating a very high

level of internal consistency (Cook, 1994). It is a widely used measure and has been found to be a reliable measure with a variety of clinical populations including "male batterers" (Rybak & Brown, 1996; Blaisdell, 1995; Grebel, 1995; Strang, 1995).

Allan, Gilbert & Goss (1994) explored the relationship of the Internalised Shame Scale with various psychological symptoms. They concluded that because the scale explores global negative beliefs it is more strongly associated with measures of psychopathology than measures which focus on shame responses in specific situations and as such is associated with measures of clinical relevance.

#### 2.3.7. Experiences in Adolescence

Social comparison and social rank in mid- adolescence (14-15 years) were obtained via a semi-structured interview (Ref. Appendix 11) based on the Adolescent Social Comparison Scale and the Adolescent Shame Proneness Scale devised by Lang (1994). Participants were asked about various factors that have been identified in the literature as being important rank issues in adolescence e.g. pubertal maturity, physical size, athletic ability, popularity etc. (Ruby, 1998; Schaal, Tremblay, Soussignan & Susman, 1996; Bulcroft, 1991), and asked to rate themselves in comparison to their peers, i.e. did they consider themselves to be inferior, superior or about the same as their peers. The data obtained was coded in order to give ordinal data.

The above information was obtained from the non-violent comparison group via a questionnaire in order to ensure anonymity (Ref. Appendix 12) and data was coded in order to give ordinal data.

## **2.4. Procedure.**

### **2.4.1 Pilot Study.**

Prior to the start of data collection, three volunteers were given the questionnaire packs to complete in order to provide information regarding approximate time taken to complete the questionnaires and to raise any issues about ambiguity of information provided or instructions given. Changes to the covering letter and demographic information sheet were minimal. The average time taken to complete the questionnaire packs was approximately 45 minutes.

### **2.4.2. Procedure for Patient Participants.**

Information leaflets giving details of the study were sent to the ward managers of each of the 18 male wards within the hospital and to 13 Registered Medical Officers (RMO's) responsible for those wards. The information leaflets gave brief details of the study and stated that participation in the study by the patients would be on a voluntary basis and information obtained would be confidential (Ref. Appendix 13).

Possible participants within the hospital were identified from the hospital Patient Information database. Letters were sent to the 11 RMO's of the 82 identified men, reminding them about the details of the study and requesting written consent for the identified men to be approached by the researcher and asked if they would be willing to participate in the study. The RMO's were referred to the inclusion and exclusion criteria and two identical consent forms were included, one to be returned to the researcher and the other copy to be kept for the patient's medical file. Once written consent from the RMO had been obtained, the researcher approached each of the patients individually regarding participation in the study. Patients were told verbally about the study and what participation in the study would include. Patients were informed that participation in the study was voluntary and the information they gave would be anonymous. They were informed that should they consent to take part in the study their ward manager and RMO would be informed, but that none of the information they gave would be shared. Patients were given a letter inviting them to participate in the study and an information leaflet (Ref. Appendix 14) to read in their own time. They were informed that a researcher would return in a few days to answer any questions and discuss if they would be willing to participate in the study. Written

consent was obtained from each man who agreed to participate in the study and witnessed by a member of ward staff. A mutually agreeable time to undertake the study was agreed with the patient. Letters were sent to each of the participant's RMO and to the manager of their ward, informing them that they had consented to participate in the study.

The researcher accompanied the participants to a private area. The researcher was present whilst participants completed the questionnaires in order to provide support and answer any questions regarding completion of the questionnaire. The questionnaires took approximately 45 minutes to complete. Following completion of all the questionnaires, the semi-structured interview was administered, which took approximately 20-30 minutes to complete.

As the questionnaires contained some potentially sensitive questions, (in particular the Conflict Tactics Scale), several precautions were taken. All of the participants were informed prior to the administration of the questionnaires that some of the questions may touch upon sensitive areas for them and that they could terminate the session or take a break at any time. At the end of each session time was spent to ask the participants how they had found completing the measures and if there were any issues they wished to discuss with their named nurse or clinical team. This is consistent with the procedure for psychology sessions within the setting that the interviews were conducted.

#### 2.4.3. Procedure for Non-Violent Comparison Group.

The non-violent comparison group was recruited from general health care settings, with additional participants being recruited via the snowball technique (Breakwell, Hammond & Schaw, 1995). The researcher approached potential participants to explain the nature of the study and to ask if they would be willing to consider participating. Participants who expressed an interest in the study were informed about what participation would involve. The inclusion criterion of at least one stable heterosexual relationship was explained and participants were asked if they would be willing to recruit anyone known to them who met the inclusion criteria. Participants who expressed an interest in the study were provided with a sufficient number of packs, which included a covering letter explaining the nature of the study and ensuring anonymity

of information provided (Ref. Appendix 15), a brief demographic information sheet (Ref. Appendix 16) together with the pack of questionnaires. A stamped addressed enveloped was included with each pack for the questionnaires to be returned anonymously to the researcher.

## **2.5. Data Analysis**

Before any analysis was carried out, variables were examined to determine whether it was appropriate to use parametric statistics. Bryman & Cramer (1997) summarise the conditions under which it is appropriate to use parametric statistics: the level of measurement is interval or ratio; the distribution of the population scores is normal; and the variances of the variables are homogenous. Variables used in the analysis were examined to determine if they met these conditions.

The data obtained from the Experiences in Adolescence semi-structured interview and questionnaire was coded in order to give ordinal data. Kolmogorov-Smirnov tests were used to assess whether the distribution of scores of variables differed significantly from normal distribution. The majority of the variables did not differ significantly from normal distribution, however, the variables obtained from the Conflict Tactics Scale and the Interpersonal Jealousy scale were found to significantly depart from normal distribution. Homogeneity of variance was assessed using Levenes Statistic. This showed that the variance of several variables were significantly different. In addition the groups were of unequal sample size (see Bryman & Cramer, 1997). In conclusion, preliminary analysis of the variables demonstrated that it could not be assumed that the conditions for parametric analysis had been satisfied, therefore non-parametric statistical analysis was performed.

Where agreement on categories was assessed, Chi-Squared Likelihood Ratios was used, as this is less affected by small sample size than Pearson's chi-square (Howell, 1992, p.114). Where comparisons between groups are made, Kruskal-Wallis non-parametric analysis of variance and Mann Whitney U non-parametric test was used.

Where the analysis investigates associations between variables, Spearmans Rank correlation test was used.



A significance level of  $p < 0.05$  was taken throughout the analysis. Furthermore, as directional hypotheses were investigated, significance testing was one-tailed.

Multiple correlations were conducted, however, a Bonferroni correction to guard against family-wise errors was not used, as there is already a low likelihood of family-wise errors due to the relatively small sample size and the limited power of non-parametric analysis (Howell, 1992, p.141).

### **3.0 Results.**

Preliminary analysis of the participant demographic information, the reliability of the self-reports of violence in intimate relationships and the reliability of the Experiences in Close Relationships will be reported first, followed by the data analysis for each hypothesis.

#### **3.1. Preliminary analysis**

##### **3.1.1 Demographic Information**

Due to the availability of participants a matched non-violent comparison group was unattainable. Demographic information was collected for descriptive purposes and to review how similar the groups were. Table 3 shows the demographic information collected for all of the three participants groups. Kruskal-Wallis analysis and Chi-square analysis were used to compare all three groups on the demographic variables.

The groups did not differ significantly in terms of age ( $\chi^2 = 1.15$ ,  $df = 2$ ,  $p = 0.56$ , ns); ethnicity ( $\chi^2 = 12.5$ ,  $df = 8$ ,  $p = 0.13$  ns); age at leaving school ( $\chi^2 = 5.82$ ,  $df = 4$ ,  $p = 0.21$ , ns); number of children ( $\chi^2 = 1.07$ ,  $df = 2$ ,  $p = 0.59$ , ns); or living arrangements prior to admission ( $\chi^2 = 12.78$ ,  $df = 8$ ,  $p = 0.12$ , ns). There was a significant difference in marital status with the general population comparison group being significantly less likely to be divorced or separated from a spouse than groups 1 and 2 ( $\chi^2 = 14.80$ ,  $df = 4$ ,  $p < 0.05$ ). Groups 1 and 2 did not differ significantly from each other ( $\chi^2 = 1.436$ ,  $df = 2$ , ns). There was an expected significant difference between the groups on educational achievements, with both the patient groups being more likely than the general population comparison group, to leave school with no formal educational achievements, ( $\chi^2 = 32.29$ ,  $df = 8$ ,  $p < 0.001$ ). There was no difference between groups 1 and 2 ( $\chi^2 = 3.37$ ,  $df = 3$ , ns).

**Table 3: Demographic Information**

Demographic Information		Groups		
		Group 1: violent to partner	Group 2: violent, not to partner	Group 3: non-violent
Age		Mean = 41.0 SD = 9.67	Mean = 43.38 SD = 12.97	Mean = 39.1 SD = 11.58
Ethnicity	White UK	56.25%	87.5%	86.2%
	Black Caribbean / West Indian	25 %	12.5%	10.34%
	Pakistani	0%	0%	3.45%
	White other	12.5%	0%	0%
	Mixed race	6.25%	0%	0%
Age at leaving school	5-9 years	0%	6.25%	0%
	10-16 years	87.5%	75%	65.5%
	17+ years	12.5%	18.75%	34.48%
Educational achievements *	No formal qualifications	75%	68.75%	6.89%
	GSE / GCSE' O'Levels	18.75%	6.25%	27.58%
	A Levels	6.25%	12.5%	10.34%
	Diplomas etc..	0%	12.5%	27.58%
	Degree level	0%	0%	27.58%
Social Class *	Professional	12.5%	6.25%	24.13%
	Managerial / Technical	0%	6.25%	34.48%
	Skilled	31.25%	12.5%	13.79%
	Semi-skilled	18.75%	12.5%	17.24%
	Unskilled	25%	56.25%	10.34%
	No occupation	12.5%	6.25%	0%
Marital status * (prior to admission)	Married, living with spouse	12.5%	25%	58.62%
	Divorced / separated	37.5%	43.75%	6.89%
	Single	50%	31.25%	34.48%
Living arrangements (prior to admission)	Alone	37.5%	12.5%	10.34%
	Spouse / common law	43.75%	50%	75.86%
	Other relative	6.25%	12.5%	6.89%
	Friends/ acquaintance	6.25%	6.25%	6.89%
	Institutional care	6.25%	18.75%	0%
Number of children		Mean = 1.56 SD = 1.97	Mean = 1.75 SD = 1.48	Mean = 1.38 SD = 1.5

(\* significant difference between the groups)

## ***Results***

There was an expected significant difference between the groups on social class (Standard Occupational Classification Vol. 3 1990-1991), with 58.6% of the general population comparison group categorised as being in social class 1 or 2 (professional and managerial / technical occupation respectively) compared to 12.5% of the patient groups.  $\chi^2 = 24.66$ ,  $df = 10$ ,  $p < 0.05$ .

There was no significant difference between groups 1 and 2 ( $\chi^2 = 5.07$ ,  $df = 5$ , ns).

Table 4 shows the demographic information collected from patients files, relating to their offending history, index offence and detention at the High secure psychiatric hospital.

Chi-square analysis and Mann-Whitney tests were used to compare the "domestically violent" (group 1) and the "extradomestically violent" (group 2) men. The groups did not significantly differ in terms of Mental Health Classification ( $\chi^2 = .571$ ;  $df = 2$ ; ns); diagnosis ( $\chi^2 = 5.45$ ;  $df = 3$ ; ns); length of stay in High Secure Hospital ( $z = 0.32$ , ns); nature of Index Offence ( $\chi^2 = 2.4$ ,  $df = 2$ , ns); victim of Index Offence ( $\chi^2 = 1.17$ ,  $df$ , ns) or multiple victims in Index Offence ( $\chi^2 = 1.16$ ,  $df = 1$ , ns). In relation to offending history the groups did not significantly differ in terms of number of previous convictions for non-violent offences ( $Z = 0.13$ , ns); violent, non-sexual offence ( $Z = 0.985$ , ns) or violent, sexual offences against adults ( $Z = 0.292$ , ns). The groups differed in terms of the number of previous convictions against children, with group 2 having significantly more previous convictions against children than group 1 ( $Z = 2.586$ ,  $p < 0.05$ ).

**Table 4: Patient Demographic Information: Offending History, Index Offence and Detention at High Secure Hospital.**

Demographic Information		Group 1: patient group-violent to partner	Group 2: patient group - not violent to partner
Mental Health Classification	Psychopathic Personality Disorder (PD)	8 (50%)	6 (37.5%)
	Mental Illness	6 (37.5%)	8 (50%)
	Dual diagnosis	2 (12.5%)	2 (12.5%)
Diagnosis	Psychopathic PD	8 (50%)	9 (56.25%)
	Schizophrenia	4 (25%)	6 (37.5%)
	Psychopathic PD and Schizophrenia	4 (25%)	0 (0%)
	Psychopathic PD and manic depressive psychosis	0 (0%)	1 (6.25%)
Length of current stay in High Secure Hospital		M = 6.13 years S.D. = 4.36 years	M = 11.25 years S.D. = 10.12 years
Nature of Index Offence	Violent - non sexual	9 (56.25%)	6 (37.5%)
	Violent, sexual against adult(s)	6 (37.5%)	6 (37.5%)
	Violent, sexual against child(ren)	1 (6.25%)	4 (25%)
Victim of Index Offence	Adult male(s)	6 (27.3%)	7 (30.4%)
	Adult female(s)	13 (59.1%)	11 (47.8%)
	Child male(s)	0 (0%)	1 (4.3%)
	Child female(s)	3 (13.6%)	4 (17.4%)
Multiple victims?	Yes	8 (50%)	5 (31.25%)
	No	8 (50%)	11 (68.75%)
Number of Previous Convictions	Non-violent	M = 5, S.D. = 4.4 Range = 0-15	M = 5.2, S.D. = 4.6 Range = 0-15
	Violent, non-sexual	M = 3.8, S.D. = 4.4 Range = 0-17	M = 2.2, S.D. = 2.5 Range = 0-8
	Violent, sexual against adult(s)	M = 1.1, S.D. = 1.3 Range = 0-3	M = 1.4, S.D. = 2.2 Range = 0-7
	Violent, sexual against child(ren) *	M = 0.3, S.D. = 1.3 Range = 0-5	M = 1.4, S.D. = 2.2 Range = 0-7

(\* significant difference between the groups)

### 3.1.2 Validity of Self-Reports of Abusiveness in Intimate Relationships

Preliminary analysis of the validity of the responses on the Conflict Tactics Scale was assessed with the short form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982), as recommended by Kane, Staiger, and Ricciardelli (2000). The measure of social desirability was used to see if any of the groups were exaggerating the more positive aspects of themselves, and were therefore more likely to under-report the use of abusive tactics in intimate relationships. Kruskal-Wallis analysis indicated that there was no significant difference between the groups on scores of social desirability ( $\chi^2 = 1.79$ ,  $df = 2$ ,  $p = .407$ ). Furthermore no significant correlations were found between any of the Conflict Tactics sub-scales and the measure of social desirability, as can be seen in table 5. Therefore, social desirability was not considered to be confounding self-reports of abusiveness within intimate relationships and was not considered in any further analysis.

**Table 5: Associations Between Self-Report of Violence in Intimate Relationships and Social Desirability.**

Conflict Tactics Scale	Social Desirability Scale	
Reasoning	$r = .06$	$p = .65$
Verbal Aggression	$r = -.20$	$p = .13$
Physical Aggression	$r = -.06$	$p = .63$
Severe Violence	$r = -.01$	$p = .96$

The mean scores obtained by each group on each of the sub-scales on the Conflict Tactics Scale are presented in table 6. Differences between the groups were examined using Kruskal-Wallis analysis. There was no significant difference found between the groups on the reasoning sub-scale. In terms of the sub-scales measuring abusiveness a significant difference was found between the groups on the verbal aggression (VA) sub-scale ( $\chi^2 = 15.17$ ,  $df = 2$ ,  $p < 0.001$ ), physical aggression (PA) sub-scale ( $\chi^2 = 39.76$ ,  $df = 2$ ,  $p < 0.001$ ) and the severe violence (SV) sub-scale ( $\chi^2 = 33.69$ ,  $df = 2$ ,  $p < 0.001$ ). Further analysis revealed a significant difference between domestically violent men and extra-domestically violent men on the three sub-scales measuring abusiveness (VA:  $Z = 2.79$ ,  $p < 0.01$ ; PA:  $Z = 3.94$ ,  $p < 0.001$ ; SV:  $Z = 3.59$ ,  $p < 0.001$ ).

Similarly domestically violent men and non-violent men differed significantly on the three sub-scales (VA:  $Z = 3.70$ ,  $p < 0.001$ ; PA:  $Z = 5.95$ ,  $p < 0.001$ ; SV:  $Z = 5.39$ ,  $p < 0.001$ ). Extra-domestically violent men and the non-violent men differed only on the PA sub-scale ( $Z = 2.99$ ,  $p < 0.01$ ).

**Table 6: Mean [Median] and Standard Deviations Obtained on the Conflict Tactics Scale.**

	Conflict Tactics Scale			
	Reasoning	Verbal Aggression	Physical Aggression	Severe Violence
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Grp. 1: Domestically Violent	6.56 [6.0] (5.12)	17.93 [17.5] (9.88)	9.06 [8.0] (9.49)	3.87 [3.0] (5.87)
Grp.2: Extra-domestically Violent	6.0 [4.0] (7.22)	8.75 [9.0] (6.9)	1.87 [1.0] (2.5)	0.37 [0.0] (1.02)
Grp.3: Non-Violent	6.41 [6.0] (3.88)	6.68 [7.0] (6.02)	0.2 [0.0] (0.49)	0.03 [0.0] (0.18)

Thus the Conflict Tactics Scale corroborated file information about the participants and provided evidence of a significant difference in the levels of abusiveness in intimate relationships between the three groups.

### 3.1.3 Reliability of the Experiences in Close Relationships Questionnaire.

Preliminary analysis of the reliability of the Experiences in Close Relationship questionnaire (ECR: Brennan et al, 1998) completed by the participants was assessed through inter-test agreement with the Relationship questionnaire (RQ: Bartholomew and Horowitz, 1991).

Cross tabulations of the participant rated attachment style categories assessed by the ECR and the RQ are shown in table 7. A likelihood ratio chi-square analysis of the two assessment measures found a significant level of agreement for the four attachment styles ( $\chi^2 = 47.38$ ,  $df = 9$ ,  $p < 0.001$ ). The RQ classified 50.8% of participants as secure, of which 35.5% were classified as

insecure by the ECR. Only a small minority (13%) of those classified as insecure on the RQ were classified as secure on the ECR. In other words participants were more likely to be classified as insecure and less likely to be classified as secure on the new measure (ECR). This is consistent with the findings of Brennan et al (1998) who report that the new measure discriminates more precisely among people with different levels of insecurity (Brennan et al, 1998, p.62). Overall, however, there was a 77% agreement between the two measures as to whether the participants were classified as having a secure or insecure attachment styles. A likelihood ratio chi-square analysis showed a significant level of agreement between the two measures on whether the participant had a secure or insecure attachment style ( $\chi^2 = 23.8$ ,  $df = 3$ ,  $p < 0.001$ ).

**Table 7: Inter-Test Agreement Between the ECR and RQ.**

<b>Experiences in Close Relationships (ECR)</b>	<b>Relationship Questionnaire (RQ)</b>				<b>Total</b>
	<b>Secure</b>	<b>Avoidant</b>	<b>Preoccupied</b>	<b>Fearful</b>	
<b>Secure</b>	20	2	0	1	23 (37.7%)
<b>Avoidant</b>	0	4	0	0	4 (6.5%)
<b>Preoccupied</b>	9	2	6	1	18 (29.5%)
<b>Fearful</b>	2	3	4	7	16 (26.3%)
<b>Column Total</b>	31 (50.8%)	11 (18.1%)	10 (16.4%)	9 (14.7%)	61 (100%)

Due to the high level of inter-test agreement found between the attachment measures, the scores obtained on the ECR measure were used for further analysis.



### 3.2. Hypothesis One

*There will be a significant association between jealousy and anger and jealousy and abusiveness in intimate relationships.*

The relationship between jealousy and anger was investigated by looking at the associations between these two variables. The relationship between jealousy and abusiveness in intimate relationships was investigated firstly by looking at the differences between the groups on the measure of jealousy, with the prediction that men who are abusive in intimate relationships will be more jealous than men who are not. In addition the association between jealousy and measures of abusiveness were investigated.

Table 8 shows that jealousy demonstrated a significant positive correlation with trait-anger and anger-expression. Interestingly, a significant positive correlation was also found between jealousy and anger-in, which refers to the degree to which an individual suppresses anger or internalises anger, directing it towards the self (Speilberger, 1988). There was no correlation between jealousy and anger-out, which refers to the degree to which an individual directs anger towards other people. Jealousy showed a significant negative correlation with anger control.

**Table 8: Associations Between Interpersonal Jealousy and Anger.**

	Anger				
	Trait Anger	Anger In	Anger Out	Anger Control	Anger Expression
Interpersonal Jealousy	$r = .34^{**}$	$r = .52^{***}$	$r = .18$	$r = -.31^{*}$	$r = .43^{**}$

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

In order to disentangle the inter-correlations between jealousy and the various measures of different aspects of anger, a stepwise multiple regression was performed.

On the first step internalised anger (anger-in) entered, the R was 0.48 and was significant

( $F = 17.82$ ,  $df = 1,59$ ,  $p < 0.001$ ), the adjusted  $R^2$  was 0.23. On the second step anger control entered, the  $R$  was 0.53 and was significant ( $F = 11.54$ ,  $df = 2,58$ ,  $p < 0.001$ ), the adjusted  $R^2$  was 0.26. Jealousy was thus associated with internalised anger ( $\beta = 0.48$ ,  $t = 4.22$ ,  $p < 0.001$ ) and was negatively associated with anger control ( $\beta = -0.23$ ,  $t = 2.07$ ,  $p < 0.001$ ), but trait anger, anger-out and anger expression was not found to be predictive of interpersonal jealousy.

Table 9 shows the mean jealousy scores obtained by each of the groups. While the mean scores obtained by the groups were in the predicted direction, Kruskal-Wallis analysis indicated that there was no significant difference between the groups on the measure of jealousy ( $\chi^2 = 2.03$ ,  $df = 2$ ,  $p = .363$ , ns).

**Table 9: Mean [Median] and Standard Deviations Obtained on the Interpersonal Jealousy Scale, by Group.**

Group.	Interpersonal Jealousy Score	
	Mean [Median]	Standard deviation
Group 1: Domestically Violent	+ 1.00 [+ 4.0]	43.33
Group 2: Extra-domestically Violent	- 11.75 [+ 2.5]	37.05
Group 3: Non-Violent	- 15.14 [- 11.0]	30.16

Small but significant positive correlations were found between interpersonal jealousy and the three measures of abusiveness in intimate relationships; verbal aggression ( $r = .27$ ,  $p < 0.05$ ); physical aggression ( $r = .288$ ,  $p < 0.05$ ) and severe violence ( $r = .320$ ,  $p < 0.05$ ).

Overall, the results showed a reasonable degree of support for hypothesis one. Although there was no difference between the three groups on measures of jealousy or anger, significant associations were found between interpersonal jealousy, anger and abusiveness in intimate relationships. In particular the results indicated that internalised anger and lack of anger control was predictive of interpersonal jealousy. The hypothesis that jealousy will be associated with anger and abusiveness in intimate relationships was therefore accepted.

### 3.3. Hypothesis Two

The second hypothesis consisted of three parts, with the aim of investigating the role of attachment style on jealousy and abusiveness in intimate relationships.

#### 3.3.1. Hypothesis 2a.

*Predominantly insecure attachment styles will be found within the group of violent men (patient population), compared with the distribution for the non-violent comparison group.*

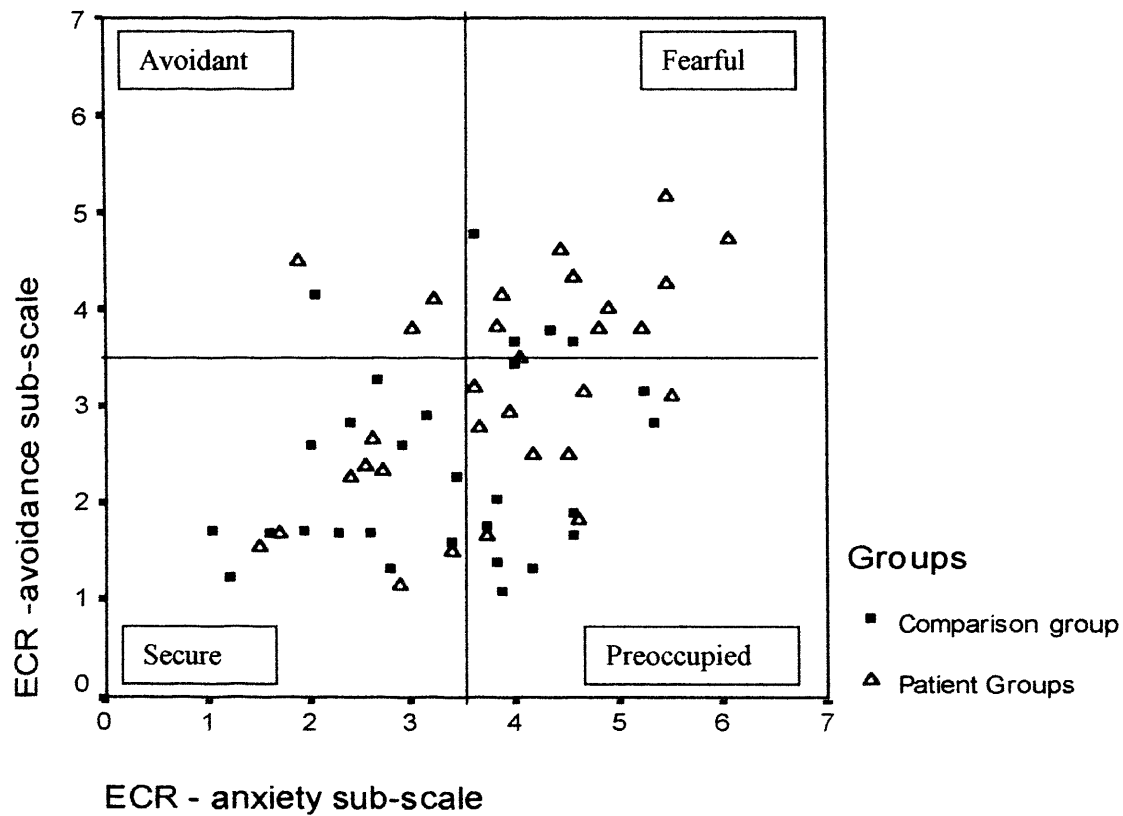
The distribution of the patient participants ("violent men") and the non-violent comparison group across the four adult attachment styles are presented in table 10.

**Table 10: The Distribution of Adult Attachment Styles (ECR).**

Group	Secure (%)	Insecure (%)			Total Insecure
		Preoccupied	Avoidant	Fearful	
<b>Violent Men (Patient population)</b>	<b>28.1</b>	<b>28.1</b>	<b>9.4</b>	<b>34.4</b>	<b>71.9</b>
<b>Non-Violent Men (comparison group)</b>	<b>48.3</b>	<b>31.0</b>	<b>3.4</b>	<b>17.2</b>	<b>51.7</b>

71.9% of the patient population's scores on the ECR indicated an insecure level of attachment, compared to 51.7% of the non-violent comparison group. In this sample the violent men showed more fearful and avoidant adult attachment styles than the non-violent comparison group. Figure 7 shows the distribution of the patient participants (violent men) and the non-violent comparison group (general population) across the attachment dimensions, clearly showing the distribution across attachment styles.

**Figure7: Scatterplot of Attachment Dimensions: Patient Population and Non-violent Comparison Group.**



The results support the hypothesis that predominantly insecure adult attachment styles will be found within the group of violent men, compared with the distribution found in the non-violent comparison group.

## 3.3.2. Hypothesis 2b

***Men who are abusive in intimate relationships will report significantly higher attachment anxiety than men who are not abusive in intimate relationships.***

Attachment anxiety was measured using the anxiety sub-scale score on the ECR.

The links between attachment anxiety and abusiveness in intimate relationships were examined firstly by testing differences between the groups on attachment anxiety, and also by examining associations between attachment anxiety and self-reports of abusiveness in intimate relationships. Table 11 shows the mean attachment anxiety scores obtained for each group and the statistical differences between the groups.

**Table 11: Mean Scores [Median] and Standard Deviations Obtained on the Attachment Anxiety Sub-scale, by Group.**

Group	Mean [Median]	S.D.	Significance Level		
			Grp. 1	Grp.2	Grp. 3
Domestically violent	4.26 [4.53]	1.09		*	**
Extra-domestically violent	3.32 [3.44]	1.10	*		
Non-violent	3.27 [3.44]	1.15	**		

\*  $p < 0.05$ , \*\*  $P < 0.01$

A significant difference was found between the three groups on attachment anxiety ( $\chi^2 = 7.50$ ,  $df = 2$ ,  $p < 0.05$ ). Further sub-analysis showed the significant difference to lie between the domestically violent men and the extra-domestically violent men, ( $Z = 2.2$ ,  $p < 0.05$ ); and between the domestically violent men and the non-violent men ( $Z = 2.5$ ,  $p < 0.01$ ).

Table 12 shows significant positive correlations between attachment anxiety and verbal aggression, physical aggression, and severe violence in intimate relationships. There was no association between attachment anxiety and reasoning in intimate relationships.

**Table 12: Associations between Attachment Anxiety and Self-Report Abusiveness in Intimate Relationships.**

	Self-Report Abusiveness (Conflict Tactics Scale)			
	Reasoning	Verbal Aggression	Physical Aggression	Severe Violence
Attachment Anxiety	$r = -.01$	$r = .39^{**}$	$r = .31^{**}$	$r = .26^*$

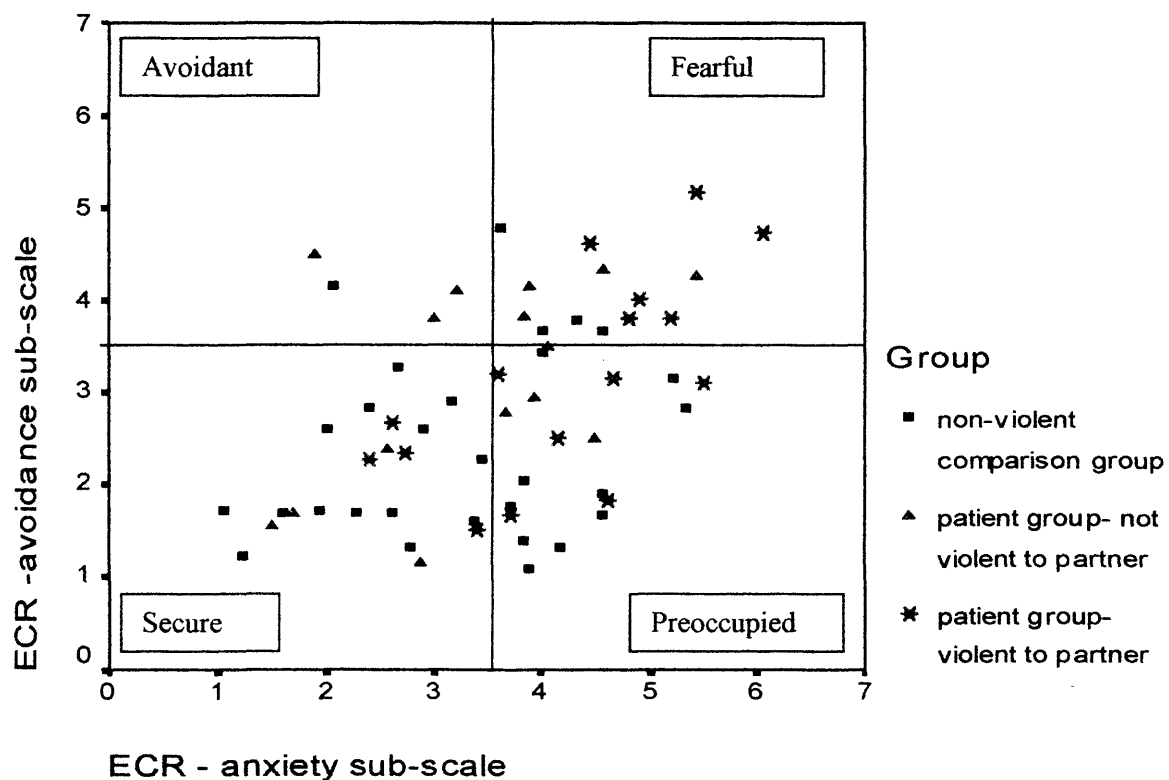
\*  $p < 0.05$ , \*\*  $p < 0.01$

Figure 8 shows the distribution of the participants across the attachment dimensions by group, clearly showing the majority of participants from the domestically violent group falling within the anxious attachment (preoccupied and fearful quadrants) styles.

Participants from the extra-domestically violent group are slightly more evenly distributed about the attachment dimensions, with fewer participants in the fearful and preoccupied quadrant.

Approximately half of the non-violent comparison group are securely attached.

**Figure 8: Distribution of Participants Across the Attachment Dimensions by Group**



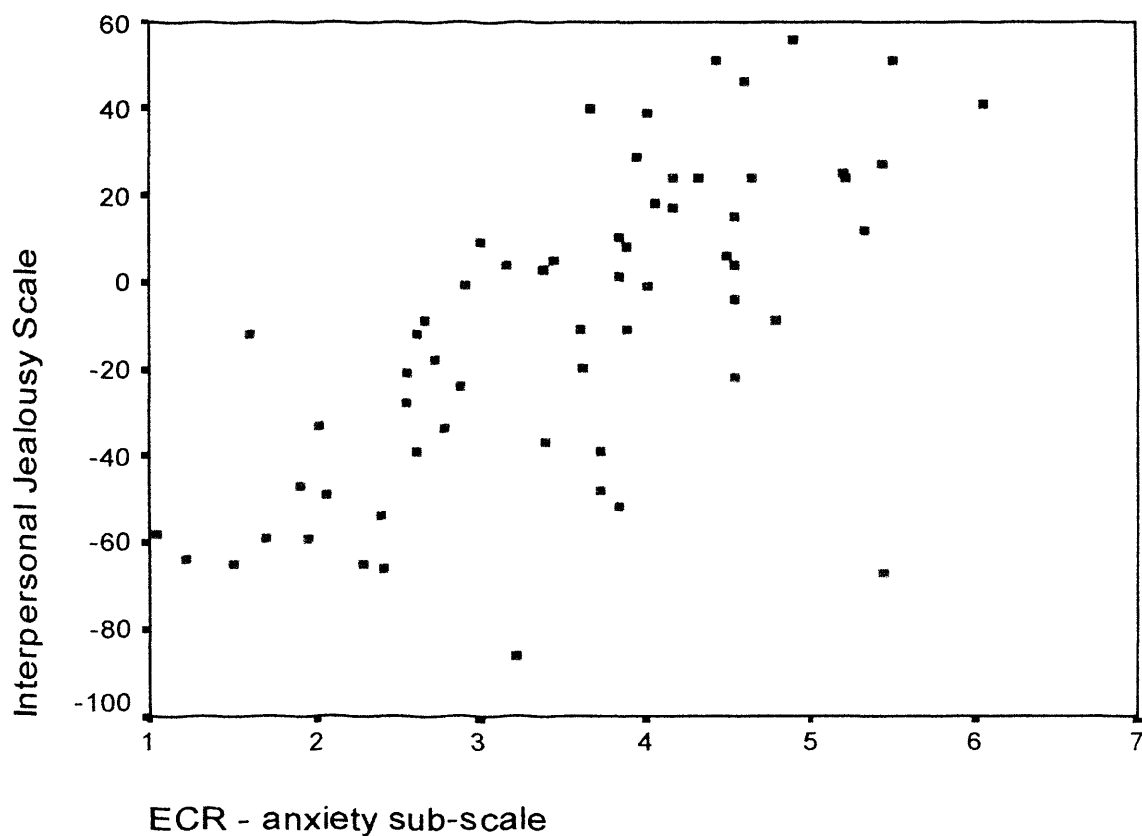
The results indicate a positive relationship between attachment anxiety and abusiveness. This support the hypothesis that men who are abusive in intimate relationships will report significantly higher attachment anxiety than men who are not abusive in intimate relationships.

### 3.3.3. Hypothesis 2c

*Attachment anxiety will be associated with jealousy in intimate relationships and anger.*

Attachment anxiety was significantly and highly positively correlated with jealousy ( $r = .71$ ,  $p < 0.001$ ). Figure 9 shows the distribution of attachment anxiety scores plotted against jealousy scores, demonstrating the strong positive correlation between attachment anxiety and jealousy in intimate relationships.

**Figure 9: Scatterplot of Interpersonal Jealousy against Attachment Anxiety**



Attachment anxiety and jealousy showed similar associations with anger. Table 13 shows that attachment anxiety also demonstrated a significant positive correlation with trait-anger and anger-expression. A significant positive correlation was also found between attachment anxiety and anger-in, which refers to the degree to which an individual suppresses anger or internalises anger, directing it towards the self (Spielberger, 1988). There was no correlation between attachment anxiety and anger-out, which refers to the degree to which an individual directs anger towards other people. Attachment anxiety showed a significant negative correlation with anger control.

**Table 13: Associations Between Attachment Anxiety and Anger**

	Jealousy	Trait Anger	Anger In	Anger Out	Anger Control	Anger Express.
Attachment Anxiety	$r = .71^{***}$	$r = .37^{**}$	$r = .63^{**}$	$r = .27$	$r = -.33^{**}$	$r = .53^{**}$

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

The results support the hypothesis that attachment anxiety will be associated with jealousy in intimate relationships and anger.

### 3.3.4 Additional Analysis

While no specific predictions were made regarding attachment avoidance, additional investigatory analysis was conducted in order to look at the possible effects of avoidance in close relationships. Analysis was two-tailed as no specific predictions were being tested.

In order to investigate the effects of attachment avoidance, differences between the groups were first examined. The associations between attachment avoidance and abusiveness in intimate relationships, jealousy and anger were also considered.

Kruskal-Wallis analysis indicated that there was a difference between the groups for attachment avoidance ( $\chi^2 = 6.36$ ,  $df = 2$ ,  $p < 0.05$ ). Further sub-analysis revealed that the difference lay between the domestically violent group and the non-violent comparison group ( $Z = 2.10$ ,  $p < 0.05$ )



and the extra-domestically violent group and the non-violent control group ( $Z = 2.04$ ,  $p < 0.05$ ). There was no significant difference between the domestically violent group and the extra-domestically violent group ( $Z = .094$ ,  $p = 0.93$ , ns).

A significant positive correlation was found between attachment avoidance and jealousy ( $r = .38$ ,  $p < 0.01$ ); trait anger ( $r = .25$ ,  $p < 0.05$ ); anger-in ( $r = .37$ ,  $p < 0.01$ ); anger expression ( $r = .41$ ,  $p < 0.01$ ); verbal aggression in intimate relationships ( $r = .42$ ,  $p < 0.01$ ); and physical aggression in intimate relationships ( $r = .32$ ,  $p < .05$ ).

The possible implications of these findings are discussed in section 4.2.4.

### **3.4. Hypothesis Three**

The third hypothesis consisted of four parts, with the aim of investigating the role of social comparison on jealousy and abusiveness in intimate relationships.

#### **3.4.1. Hypothesis 3a**

***Men who are abusive in intimate relationships will compare themselves more unfavourable to their peers than men who are not abusive in intimate relationships.***

This hypothesis was investigated firstly by looking at the associations between abusiveness and social comparison and also by looking at the differences in social comparison between the groups.

Table 14 shows the associations found between the social comparison scale and the measure of abusiveness in intimate relationships. Significant negative correlations were obtained between of the sub-scales on the social comparison scale and the measure of verbal aggression in intimate relationships, indicating that men who compare themselves unfavourably to their peers (i.e. perceiving themselves to be of "lower rank") are more likely to be verbally aggressive in intimate relationships. Physical aggression and severe violence in intimate relationships was significantly negatively associated with group fit, (i.e. the degree to which men feel accepted, similar to and a part of their peer group). This suggests that men who report to feel different to their peers and

unaccepted by their peer group are more likely to be physically aggressive in intimate relationships. Rank status and social attractiveness showed a no significant associations with physical aggression and severe violence in intimate relationships.

**Table 14: Associations Between Social Comparison and Abusiveness in Intimate Relationships**

Abusiveness in Intimate Relationships	Social Comparison			
	Rank	Social Attractiveness	Group Fit	Total
Verbal Aggression	$r = -.32^{**}$	$r = -.30^{**}$	$r = -.35^{**}$	$r = -.36^{**}$
Physical Aggression	$r = .13$	$r = -.05$	$r = -.25^*$	$r = -.19$
Severe Violence	$r = .13$	$r = -.09$	$r = -.24^*$	$r = -.20$

\*  $p < 0.05$ , \*\*  $p < 0.01$

The mean scores obtained by each of the groups on the total social comparison score indicated findings in the predicted direction, (Domestically Violent: mean = 22.75, SD = 7.2; Extra-domestically violent: mean = 24.93; SD=4.73; Non-violent: mean = 25.44, SD = 4.37). However, Kruskal-Wallis analysis revealed no significant difference ( $\chi^2 = 5.161$ ,  $df = 2$ ,  $p = 0.76$ , ns).

There was no significant difference between the groups on rank status ( $\chi^2 = 2.736$ ,  $df = 2$ ,  $p = .255$ , ns) or social attractiveness ( $\chi^2 = 4.192$ ,  $df = 2$ ,  $p = .123$ , ns). A significant difference was found between the groups in terms of group fit ( $\chi^2 = 6.396$ ,  $df = 2$ ,  $p < 0.05$ ). Further sub-analysis revealed that the difference lay between the domestically violent group and the non-violent comparison group ( $Z = 2.448$ ,  $p < 0.05$ ) in the predicted direction. Although approaching significance, there was no significant difference between the domestically violent and the extra-domestically violent men ( $Z = 1.90$ ,  $p = .056$ , ns). There was no significant difference between extra-domestically violent men and non-violent men ( $Z = .166$ ,  $p = .87$ , ns).

These results provide limited support for hypothesis 3a, indicating that men who are abusive in intimate relationships perceive themselves to be different to and unaccepted by their peer group.

## 3.4.2. Hypothesis 3b

***Low Social Comparison will be associated with higher levels of jealousy in intimate relationships and anger.***

This hypothesis was investigated by looking at the associations of social comparison with jealousy and anger.

**Table 15: Associations Between Social Comparison and Interpersonal Jealousy.**

	Social Comparison			
	Rank Status	Social Attractiveness	Group Fit	Total
<b>Interpersonal Jealousy</b>	<b><math>r = .21</math></b>	<b><math>r = .08</math></b>	<b><math>r = -.25^*</math></b>	<b><math>r = .21</math></b>

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 15. shows a small but significant negative correlation was found between jealousy and group fit indicating that men who perceive themselves to be similar to and accepted by their peers report less jealousy in interpersonal relationships. There was no significant association between jealousy and rank status, social attractiveness or the overall social comparison score.

Table 16 shows the associations between social comparison and anger. Anger expression, which refers to the extent to which anger is either suppressed or expressed in aggressive behaviour or both, is significantly negatively associated with all the factors of social comparison. This finding indicates that men who compare themselves favourably to their peers are less likely to suppress anger or express it in a hostile way. Anger control was significantly positively associated with the total social comparison score, rank status and group fit. This finding indicates that men who perceive themselves to be of high status in comparison to their peers and feel similar to and accepted by their peer group are more likely to attempt to control the expression of anger. Anger-in was significantly negatively associated with the total social comparison score, rank status and group fit. This finding indicates that men who perceive themselves to be of low social status and feel different to or unaccepted by their peers are more likely to attempt to suppress their angry

feelings or direct them towards the self. There was no significant association between social comparison and trait anger or anger-out.

**Table 16: Associations Between Social Comparison and Anger.**

	Anger				
	Trait Anger	Anger In	Anger Out	Anger Control	Anger Expression
Rank Status	$r = -.08$	$r = -.32^{**}$	$r = -.00$	$r = .30^{**}$	$r = -.36^{**}$
Social Attractiveness	$r = .00$	$r = -.20$	$r = -.04$	$r = .16$	$r = -.22^{*}$
Group Fit	$r = -.03$	$r = -.38^{***}$	$r = -.08$	$r = .31^{**}$	$r = -.40^{***}$
Total	$r = -.03$	$r = -.34^{**}$	$r = -.07$	$r = .30^{**}$	$r = -.37^{**}$

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

These results provide partial support for the hypothesis that social comparison will be associated with jealousy and anger. The results highlighted the particular association of group fit with interpersonal jealousy and attempts to suppress angry feelings or to internalise them.

### 3.4.3. Hypothesis 3c.

***Low social comparison will be associated with higher levels of internalised shame.***

Table 17 shows the associations between social comparison and internalised shame. Significant and relatively strong negative associations were found between internalised shame and rank status, social attractiveness, group fit and the total social comparison score. These results indicate that men who perceive themselves to be of lower social status, be less socially attractive than their peers and feel different to or unaccepted by their peer group, report higher levels of internalised shame.

**Table 17: Associations Between Social Comparison and Internalised Shame.**

	Social Comparison			
	Rank Status	Social Attractiveness	Group Fit	Total
<b>Internalised Shame</b>	<b><math>r = -.42^{***}</math></b>	<b><math>r = -.36^{**}</math></b>	<b><math>r = -.57^{***}</math></b>	<b><math>r = -.51^{***}</math></b>

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

The results support the hypothesis that low social comparison will be associated with higher levels of internalised shame.

#### 3.4.4. Hypothesis 3d.

***Internalised shame will be associated with anger and abusiveness in intimate relationships.***

This hypothesis was investigated firstly by looking at the associations between internalised shame and anger. In order to look at the associations between internalised shame and abusiveness in intimate relationships, differences between the groups were investigated. In addition associations between internalised shame and the measure of abusiveness in intimate relationships were explored.

Table 18 shows the associations between internalised shame and anger. Significant positive correlations were found between internalised shame and trait-anger, anger-in, anger-out and anger-expression. These results indicate that individuals who report high levels of internalised shame are more likely to have a general propensity to experience anger, attempt to suppress angry feelings or direct them inwards, express angry feeling towards others in a hostile way and express anger, either internally or externally, frequently. A significant negative correlation was found between internalised shame and anger control, indicating that individuals who experience high levels of internalised shame are less likely to attempt to control the expression of anger.

**Table 18: Associations Between Internalised Shame and Anger.**

	Anger				
	Trait Anger	Anger In	Anger Out	Anger Control	Anger Expression
Internalised Shame	$r = .51^{***}$	$r = .64^{***}$	$r = .40^{**}$	$r = -.28^*$	$r = .65^{***}$

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 19 shows the mean scores and standard deviations obtained on the Internalised Shame Scale by each of the groups and the statistical significance between them. Kruskal-Wallis analysis demonstrated a significant difference between the groups of levels of internalised shame ( $\chi^2 = 6.014$ ,  $df = 2$ ,  $p < 0.05$ ). Further sub-analysis revealed that this difference lay between the domestically violent group and the non violent group ( $Z = 2.360$ ,  $p < 0.05$ ). While the mean scores suggested that domestically violent men report higher levels of internalised shame than the extra-domestically violent men do (Ref. Table 19), this difference was not significant ( $Z = 1.885$ ,  $p = 0.59$ , ns). There was no significant difference observed between the extra-domestically violent men and the non-violent comparison group ( $Z = .024$ ,  $p = 0.98$ , ns).

**Table 19: Mean Scores [Median] and Standard Deviations Obtained on the Internalised Shame Scale, by Group.**

Group.	Internalised Shame		Significance		
	Mean [Median]	SD	Grp. 1	Grp. 2	Grp. 3
Domestically Violent	38.06 [33.0]	22.35			*
Extra-domestically Violent	25.62 [22.0]	18.04			
Non-Violent	23.03 [20.0]	14.92	*		

\*  $p < 0.05$ , \*\*  $P < 0.01$

Table 20 shows the associations between internalised shame and abusiveness in intimate relationships as measured on the Conflict Tactics Scale. Significant positive correlations were found between internalised shame and verbal aggression, physical aggression and severe violence in intimate relationships.

**Table 20: Associations Between Internalised Shame and Abusiveness in Intimate Relationships.**

	Abusiveness in Intimate Relationships		
	Verbal Aggression	Physical Aggression	Severe Violence
Internalised Shame	$r = .39^{**}$	$r = .32^{**}$	$r = .33^{**}$

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\* $p < 0.001$

The results supported the hypothesis that internalised shame will be associated with anger and abusiveness in intimate relationships.

### 3.5. Hypothesis Four

The forth hypothesis consisted of two parts, with the aim of investigating the role of social comparison in adolescence in the development of abusiveness in intimate relationships.

#### 3.5.1 Hypothesis 4a.

*Men who are abusive in intimate relationships will report a "low rank" status in adolescence (i.e. will report themselves to have been "inferior" to their peers in terms of pubertal maturity, size, athletic ability, popularity etc).*

This hypothesis was investigated firstly by looking at the differences in rank status in adolescence between the groups and also by looking at the associations between the measure of abusiveness in intimate relationships and rank status in adolescence.

Rank status in adolescence was measured using the semi-structured interview or questionnaire format with participants reporting whether they felt inferior, the same as or superior to their peers on various factors (Ref. Appendix 17, for tables showing the percentage distribution for each category between the groups). This data was coded to give ordinal data to allow for Kruskal-Wallis analysis.

Kruskal-Wallis analysis demonstrated a significant difference between the groups on the total score obtained on the measure of rank status in adolescence ( $\chi^2 = 11.57$ ,  $df = 2$ ,  $p < 0.01$ ). Further

## Results

sub-analysis revealed that the difference lay between domestically violent men and the non-violent comparison group ( $Z = 3.40$ ,  $p < 0.01$ ). There was no significant difference and between the domestically violent men and the extra-domestically violent men ( $Z = 1.98$ ,  $p = 0.051$ ) or between the extra-domestically violent men and the non-violent comparison group ( $Z = 1.14$ ,  $p = .256$ , ns). Kruskal-Wallis analysis revealed that there was a significant difference between the groups on the following sub-scales; academic ability ( $\chi^2 = 10.63$ ,  $df = 2$ ,  $p < 0.01$ ); feelings of being different ( $\chi^2 = 22.78$ ,  $df = 2$ ,  $p < 0.001$ ) and feelings of being accepted ( $\chi^2 = 30.31$ ,  $df = 2$ ,  $p < 0.001$ ). Further sub-analysis revealed that the difference lay between domestically violent men and the non violent comparison group, (Academic ability:  $Z = 2.74$ ,  $p < 0.01$ ; Different:  $Z = 4.42$ ,  $p < 0.001$ ; Accepted:  $Z = 3.89$ ,  $p < 0.001$ ), and the extra-domestically violent men and the non-violent comparison group (Academic ability:  $Z = 2.62$ ,  $p < 0.01$ ; Different:  $Z = 3.22$ ,  $p < 0.01$ ; Accepted:  $Z = 3.56$ ,  $p < 0.001$ ). There was no significant difference on any of the sub-scales between the domestically violent men and the extra-domestically violent men (Academic ability:  $Z = 0.13$ ,  $p = .93$ , ns; Different:  $Z = 1.78$ ,  $p = 0.11$ , ns; Accepted:  $Z = .88$ ,  $p = 0.45$ , ns).

Table 21 shows that significant negative correlations were found between verbal aggression, physical aggression and severe violence in intimate relationships and the total score for rank status in adolescence. Overall, this result indicates that men who report to be abusive in intimate relationships are more likely to report low rank in adolescence in comparison to their peers. Small but significant negative correlations were found between verbal and physical aggression in intimate relationships and the different and accepted sub-scales. These results indicate that men who report to having felt different to their peers or unaccepted by their peer group in adolescence are more likely to report being verbally and physically abusive in their adult intimate relationships. Small but significant negative correlations were also found between physical strength and size and verbal aggression, physical aggression and severe violence in intimate relationships. These results indicate that men who report to have considered themselves to be smaller and weaker than their peers in adolescence, report being more abusive in their adult intimate relationships. Significant negative correlations were found between verbal and physical aggression in intimate relationships and the academic ability sub-scale, indicating that men who perceived themselves as being less academic than their peers in adolescence, were more likely to



report being verbally and physically abusive in their adult intimate relationships. A small but significant negative association was found between athletic ability and verbal aggression. There was no significant association between athletic ability and physical aggression or severe violence. No significant associations were found between puberty, shy, popularity and attractiveness and any of the measures of abusiveness in intimate relationships.

**Table 21: Associations Between Rank Status in Adolescence and Abusiveness In Intimate Relationships.**

Rank Status In Adolescence	Abusiveness in Intimate Relationships		
	Verbal Aggression	Physical Aggression	Severe Violence
Puberty	$r = -.17$	$r = -.10$	$r = -.17$
Shy	$r = .08$	$r = .12$	$r = .01$
Academic ability	$r = -.44^{**}$	$r = -.28^{*}$	$r = -.21$
Popularity	$r = -.13$	$r = -.05$	$r = -.04$
Attractiveness	$r = -.19$	$r = -.10$	$r = -.13$
Physical Strength	$r = -.25^{*}$	$r = -.26^{*}$	$r = -.28^{*}$
Physical Size	$r = -.28^{*}$	$r = -.27^{*}$	$r = -.27^{*}$
Athletic ability	$r = -.25^{*}$	$r = -.15$	$r = -.13$
Different	$r = -.29^{*}$	$r = -.24^{*}$	$r = -.21$
Accepted	$r = -.28^{*}$	$r = -.25^{*}$	$r = -.21$
<b>Total</b>	<b><math>r = -.45^{**}</math></b>	<b><math>r = -.32^{**}</math></b>	<b><math>r = -.33^{**}</math></b>

\*  $p < 0.05$ , \*\*  $p < 0.01$

The results provided partial support for the hypothesis. Correlations looking at the association between rank status in adolescence and abusiveness in intimate relationships, indicated that men who report themselves to be of low rank status in adolescence report higher levels of abusiveness in intimate relationships. In particular the correlations highlighted physical size and strength in adolescence and feeling similar to and accepted by the peer group as being negatively associated with abusiveness in intimate relationships in adulthood. Analysis of the differences between the groups provided mixed support. Differences were found between the non-violent comparison group and both of the other groups. However there were no significant differences found between the domestically violent men and the extra-domestically violent men, suggesting that violent men in general report lower rank status in adolescence than non-violent men.

### 3.5.2. Hypothesis 4b

***Reported "low rank" status in adolescence will be associated with continued low social comparison and internalised shame in adulthood.***

The final hypothesis was investigated firstly by looking at the associations between rank status in adolescence and the social comparison scale. Comparisons between rank status in adolescence and internalised shame were then investigated.

Table 22 shows that the total score obtained on the rank status in adolescence measure was significantly positively correlated with the total score of the social comparison scale. In addition the total score obtained on the rank status in adolescence measure was also significantly positively correlated with rank status, social attractiveness and group fit sub-scales on the social comparison measure. These scores indicate that men who perceived themselves to be of low rank status in adolescence are more likely to report continued low social comparison in adulthood. More detailed analysis revealed that rank status in adulthood was significantly positively correlated with popularity, attractiveness, physical strength and size, athletic ability and feeling the same as the peer group in adolescence. Social attractiveness in adulthood was significantly positively correlated with popularity and athletic ability in adolescence. Group fit in adulthood was significantly positively correlated with popularity, attractiveness, athletic ability and feeling the same as and accepted by the peer group in adolescence. No significant associations were found between onset of puberty, academic ability or shyness in adolescence and social comparison in adulthood.

**Table 22: Associations Between Rank status in Adolescence and Social Comparison.**

Rank Status in Adolescence	Social Comparison			
	Rank Status	Social attractiveness	Group Fit	Total
Puberty	$r = .12$	$r = .17$	$r = .21$	$r = .20$
Shy	$r = .18$	$r = .08$	$r = .20$	$r = .18$
Academic ability	$r = .16$	$r = .07$	$r = .11$	$r = .14$
Popularity	$r = .24^*$	$r = .28^*$	$r = .26^*$	$r = .29^*$
Attractiveness	$r = .27^*$	$r = .16$	$r = .23^*$	$r = .25^*$
Physical Strength	$r = .24^*$	$r = .11$	$r = .19$	$r = .21$
Physical Size	$r = .25^*$	$r = .09$	$r = .18$	$r = .20$
Athletic ability	$r = .36^{**}$	$r = .35^{**}$	$r = .23^*$	$r = .33^{**}$
Different	$r = .23^*$	$r = .20$	$r = .33^{**}$	$r = .30^*$
Accepted	$r = .15$	$r = .15$	$r = .31^{**}$	$r = .25^*$
<b>Total</b>	$r = .45^{***}$	$r = .36^{**}$	$r = .47^{***}$	$r = .49^{***}$

\*  $p < 0.05$ , \*\*  $p < 0.01$ . \*\*\* $p < 0.001$

Table 23 shows a significant negative association between internalised shame and the total rank status score in adolescence, indicating that men who report themselves to have been inferior to their peers in adolescence report higher levels of internalised shame in adulthood. More detailed analysis revealed significant negative associations between internalised shame and the accepted and different sub-scales of the adolescent rank status measure. This result indicates that men who report to have felt different to and unaccepted by their peer group in adolescence report higher levels of internalised shame. A significant negative correlation was also found with the shy sub-scale, indicating that men who perceived themselves to be shyer than their peers report higher levels of internalised shame.

**Table 23: Associations Between Rank status in adolescence and Internalised Shame.**

<b>Rank status in Adolescence</b>	<b>Internalised Shame</b>
Puberty	$r = -.15$
Shy	$r = -.22^*$
Academic ability	$r = -.18$
Popularity	$r = -.21$
Attractiveness	$r = -.19$
Physical Strength	$r = -.10$
Physical Size	$r = -.15$
Athletic ability	$r = -.17$
Different	$r = -.35^{**}$
Accepted	$r = -.31^{**}$
<b>Total</b>	$r = -.41^{**}$

\*  $p < 0.05$ , \*\*  $p < 0.01$

The results provided some support to the hypothesis that low rank status in adolescence would be associated with continued low social comparison and internalised shame in adulthood. In particular, the results highlighted the association between feeling different to and unaccepted by peers in adolescence with internalised shame and feeling unaccepted (group fit) by peers in adulthood.

## **4.0. Discussion.**

In the following section, the results for each hypothesis will be discussed within the context of previous research and theory. This will be followed by a discussion of the strengths of the study, including clinical implications. The limitations of the study will then be discussed and areas for future research will be highlighted.

### **4.1. Hypothesis One: Jealousy and Abusiveness.**

Hypothesis one looked at the associations between jealousy and anger and jealousy and abusiveness.

The results of the study demonstrated significant associations between interpersonal jealousy and anger. These findings are consistent with the literature that reports that jealousy is associated with high levels of anger in intimate relationships (Dutton et al, 1996; Dutton and Browning, 1988). Further analysis indicated that jealousy was specifically associated with internalised anger and a lack of anger control.

Although an association between jealousy and anger-in appears initially counter intuitive, anger-in is concerned with the degree to which people mentally ruminate or "stew" over angry feelings without expressing them overtly. Such a picture of anger suppression and rumination is consistent with the first phase of the cycle of violence proposed by Walker (1979). This phase is characterised by escalating tension, jealousy, possessiveness and ruminative critical thinking which presents a picture of a seething rage (Dutton, 1995a).

The negative association between jealousy and anger control, suggests that people who report higher levels of jealousy report being less likely to attempt to control the expression of anger. Anger-in accompanied by a lack of anger control is consistent with the second phase of the cycle of violence, which is characterised by an, "uncontrollable discharge of tensions that have built up during phase one" (Walker, 1979, pp.61).

Consistent with this suggestion, Megargee (1966) discussed the role of inhibitors leading to "over-controlled" violent offenders. Over-controlled offenders have strong inhibitions to violence and will aggress only when anger arousal is sufficient to overcome them. They therefore attack

others rarely, but with extreme intensity if they do so and are hence more commonly found among those who have been extremely assaultive (Blackburn, 1989). Such over-controlled offenders are likely to present with a high degree of internalised anger and attempts to suppress anger. Dutton (1995b) profiled male "batterers" on the Millon Clinical Multiaxial Inventory-II (MCMI-II, Millon, 1987) and noted peaks on antisocial personality and borderline personality organisation. Phasic anger release, consistent with the cycle of violence, has been described as a central feature of borderline personality organisation and borderline personality disorder (Dutton, 1999).

The results of the study demonstrated that interpersonal jealousy showed small but significant associations with the three sub-scales of abusiveness in intimate relationships; verbal aggression, physical aggression and severe violence, with the strongest associations being observed between interpersonal jealousy and severe violence. This finding is consistent with the literature on spousal assault and spousal homicide, which cites jealousy, usually at the point of perceived relationship dissolution, as a dominant causal theme (Coleman, 1997; Polk and Ranson, 1991; Adams, 1990). However, the finding of an association between interpersonal jealousy and abusiveness does not imply causation. An alternative explanation for these findings could be that individuals within abusive relationships are more likely to make threats to leave thus increasing the likelihood of their partner perceiving situations as a potential threat to an already unstable relationship. In reality it is possibly a combination of these factors that lead to an association between jealousy and abusiveness.

The associations found between anger and jealousy and jealousy and abusiveness is consistent with the model of phasic anger release following a period of internalising anger which is characterised by ruminative critical thinking, seething rage and escalating tension. Dutton et al (1996) reported that in the context of male abusiveness to intimate partners, the predisposition towards ruminative thought probably contributes to the "incubation" of homicidal impulses (Meloy, 1992; Revitch and Schlesinger, 1981). Similar processes have been suggested to transpire during the stalking phases of estrangement (Meloy, 1998).

However, although significant associations were found between jealousy and anger and jealousy and abusiveness, there were no significant differences between any of the groups on the measure of jealousy or anger. One possible explanation for this could be the relatively ambiguous distinction between the two groups of violent men of a conviction of domestic violence.

Preliminary analysis revealed that, although there were significant differences between the groups on reports of abusiveness in intimate relationships, some of the "extra-domestically violent" men were also abusive in intimate relationships. This may have confounded the results. This finding is consistent with the literature that reports that men who are violent to their spouses are more likely than the general population to engage in violence towards other people and vica-versa (Goodyear-Smith and Laidlow, 1999; Sorenson, Upchurch and Stenl, 1996). The "domestically violent" group and the "extra-domestically violent" men may reflect groups of men on a continuum who are violent to their partners to a greater or lesser degree. Thus any observed differences between groups may be obscured by the relatively coarse distinction between them.

Low levels of abusiveness in intimate relationships were reported by the non-violent comparison group, consistent with the general population norms (Straus, 1979), yet there were no significant differences found between the non-violent comparison group and either of the other two groups on reports of jealousy or anger.

While the mean jealousy scores obtained by each of the three groups were in the predicted direction statistical analysis revealed no significant difference between them. One possible explanation for this is that the measure of jealousy used did not adequately distinguish normal reactive jealousy from pathological jealousy.

The Interpersonal Jealousy Scale (IJS) presents participants with various situations which are potentially jealousy provoking and asks them to rate the likelihood of a particular emotional response. It could be argued that such emotional responses are normal reactions to jealousy provoking situations. In not looking at the behavioural responses to such situations, the IJS does not identify pathological reactions to jealousy provoking situations.

Nevertheless, the IJS does capture an individual's propensity to judge relatively ambiguous events as jealousy provoking or not, and as such should differentiate between individuals who are vigilant to signs of abandonment or rejection. Within each group there was a wide a variation of

jealousy scores (suggested by the relatively large standard deviation and the non-normal distribution of data within each group). This would suggest that within each group there were some men who perceived themselves to be highly jealous (i.e. vigilant to signs of abandonment or rejection) as well as men who reported low levels of jealousy. Hence any differences between the groups were not large enough to reach significance. Likewise, as anger was associated with jealousy, it is possible that anger was also masked by this variation and distributed across the groups to a degree where the difference between the groups was not large enough to reach significance.

#### 4.1.1. Summary.

The findings of this study identified significant associations between interpersonal jealousy and anger and interpersonal jealousy and abusiveness in intimate relationships. Consistent with the notion of the cycle of violence (Walker, 1979), interpersonal jealousy is associated with internalising anger and ruminative critical thinking, presenting a picture of a seething rage. In the absence of anger control, such rage may result in abusiveness as a way of discharging the tension that has built up (Dutton, 1996; Walker, 1979).

As there was no significant difference found between the groups on levels of jealousy, it would appear that jealousy alone is not enough to explain the differing levels of abusiveness in intimate relationships. It is therefore likely that other factors need to be taken into account. For this reason a general positive association between jealousy and abusiveness is accepted with some reservation.



#### **4.2. Hypothesis Two: Attachment Style.**

The second hypothesis consisted of three parts, with the aim of investigating the role of attachment style on jealousy and abusiveness within intimate relationships.

##### **4.2.1. Hypothesis 2a.**

The results of this study demonstrated that predominately insecure attachment styles were found within the group of violent men, compared to the non-violent comparison group. This finding is consistent with the research into adult attachment styles, which has shown that insecure attachment styles predominate in both at risk and clinical populations (Stalker and Davies, 1998; Van IJzendoorn and Bakermans-Kransburg, 1996; Ward, Hudson and Marshall, 1996).

Longitudinal research suggests that attachment styles can be very stable (Klohnen and Bera, 1998), and the literature to date would suggest that adult attachment styles evolve out of earlier parent-child attachment histories in their family of origin (Kesner and McKenry, 1998). The theoretical links between adverse childhood experiences, insecure attachment style and later psychopathology (Jones, 1996), suggests that the development of later difficulties may best be understood by examining the long-term effects of childhood adversity on attachment relationships (Dutton, 1999; Lyons-Ruth, 1996).

The data obtained in this study indicated that only 6.5% of participants presented with an "avoidant" attachment style, which is significantly lower than the distribution found in the general population norms (Brennan, Clark and Shaver, 1998). One possible reason for this could be that avoidant individuals tend to downplay the importance of relationships in order to maintain their self-esteem (Dutton et al, 1994). It could therefore be suggested that they are less likely to become involved in long-term or stable relationships. It is possible that the inclusion criterion for this study, of at least one stable relationship lasting at least six months, inadvertently excluded individuals with an avoidant attachment style.

Interestingly, during the course of data collecting it was noted that several of the participants "sexualised" some of the items on the ECR. This was particularly noticeable for the items relating to the avoidance dimension, e.g. "I get uncomfortable when a partner wants to be very close",

"Just when my partner starts to get close to me, I find myself pulling away". As a result of the sexualisation of these items, it appeared that men were less likely to agree with them. This may explain the relatively low proportion of individuals who presented with an avoidant attachment style compared to the general population norms (Brennan, Clark and Shaver, 1998). It is possible that this sexualisation of attachment items may have skewed the distribution of attachment scores, so that "avoidant" individuals (high avoidance, low anxiety) would be relatively more likely to report a "secure" attachment style (low avoidance, low anxiety). Likewise "fearful" individuals (high avoidance, high anxiety) may be relatively more likely to report a "preoccupied" attachment style (low avoidance, high anxiety).

A number of authors have highlighted the difficulty associated with sexualising the need for security and affection (Shaver and Hazan, 1989; Marshall, 1989). This phenomenon has been reported to be salient in male offenders, particularly sexual offenders, for whom sexual deviancy is seen as an attempt to gain intimacy through sexual contact (Hudson and Ward, 1997; Garlick, Marshall and Thornton, 1996). Dutton, van Ginkel and Landolt (1996) reported that male "batterers" have difficulty recognising the broader concept of attachment and may construe attachment in terms of a sexual theme, which they suggested is likely to be a by-product of male sex role socialisation (Dutton, 1995b).

Due to the methodology employed, it is unknown if the sexualisation of items on the ECR also occurred within the non-violent comparison group. The suggestion that some of the participants in the present study may have sexualised items on the ECR, thus skewing the data is anecdotal and further research is required to investigate this possibility and any implications this may have on the self-report measurement of attachment styles in romantic relationships.

#### 4.2.2. Hypothesis 2b.

The results of this study supported that hypothesis that men who are abusive within intimate relationships report significantly higher attachment anxiety than men who are not abusive within intimate relationships.

Domestically violent men reported significantly higher levels of attachment anxiety than both the extra-domestically violent men and the non-violent comparison group. This finding is consistent with the suggestion in the literature that attachment anxiety is an important factor in explaining violence in intimate relationships (Dutton, 1999; Kesner and McKenry, 1998; Dutton et al, 1994). In addition, attachment anxiety was significantly associated with the three sub-scales of abusiveness in intimate relationships; verbal aggression, physical aggression and severe violence.

The two attachment styles defined in terms of high attachment anxiety are the preoccupied attachment style and the fearful attachment style. Bartholomew and Shaver (1998) report that high anxiety about the approval of others in significant relationships is associated with a sense of love unworthiness. Anxiously attached individuals have strong needs for external validation, desiring relationships to gain self-acceptance. Individuals characterised by high attachment anxiety, anticipate and readily perceive rejection and, as such are vigilant to any cues of abandonment and separation. Downey and Feldman (1996) report that men who are violent to their intimate partners are more rejection sensitive than non-violent men and are more likely to perceive rejection from ambiguous behaviours. Thus male violence against an intimate partner could be conceptualised as a form of protest behaviour against perceived threats of separation or unavailability driven by attachment anxiety (van Ginkel and Landolt, 1996; Campbell and Muncer, 1994; Dutton Polk and Ranson, 1991; Daly and Wilson, 1988; Daly et al, 1982).

However, the association between attachment anxiety and abusiveness in intimate relationships does not imply causation and an alternative explanation for this finding could be that the high attachment anxiety reported by the domestically violent men is a consequence of the fact that they have committed serious offences against intimate partners. Specifically differences between the groups on reports of attachment anxiety may simply reflect an individual's accurate perception of the difficulties they have experienced in previous relationships and anxiety about either attempting to repair their relationships or to develop new relationships given their current situation. However, theoretically attachment anxiety has its roots in childhood relationships with parents and therefore it is likely that attachment has primacy to any variable associated with it (Klohn and Bera, 1998; Bowlby, 1969).

The finding that domestically violent men report higher levels of attachment anxiety than extra-domestically violent men is important as previous research on the correlates of violence have offered little that differentiates between these groups (Goodyear-Smith and Laidlow, 1999). Previous research looking at the attachment styles of sex offenders has suggested that attachment theory may have some potential to identify the relationship between an individual's offence pattern and attachment status (Ward, Hudson and Marshall, 1996). However, the use of categorical attachment measures in previous research has resulted in the majority of violent offenders being classified as insecurely attached with little to differentiate between them (Hudson and Ward, 1997; Ward, Hudson and Marshall, 1996).

This study employed the use of a dimensional measure of adult attachment in intimate relationships. The findings, consistent with a continuum model, suggest that "domestically" violent men and "extra-domestically violent" men may differ to the degree in which they experience anxiety in close relationships. Such findings may have implications for both the assessment and treatment of domestically and extra-domestically violent men.

#### 4.2.3. Hypothesis 2c.

The results of the study supported the hypothesis that attachment anxiety will be positively associated with jealousy in intimate relationships, and with anger.

A strong significant positive association was observed between attachment anxiety and jealousy. This finding is consistent with the literature that suggests that the attachment system and the jealousy complex share the common function of maintaining relationships and an individual's sense of security about them (Guerrero, 1998; Sharpsteen and Kirkpatrick, 1997). Both the attachment system and the jealousy complex are therefore likely to be triggered by events that threaten the relationship or one's perceived ability to maintain it.

Sharpsteen and Kirkpatrick (1997) reported that the quantitative individual differences in the levels of distress that are related to the internal working models of the self (i.e. attachment anxiety), are paralleled in the qualitative individual differences in the expression of jealousy. They concluded that the thoughts, feelings and behaviours that make up the jealousy complex are, at least in part, the same thoughts, feelings and behaviours that occur when the attachment system is activated by the loss, or threatened loss, of an attachment figure.

The results of this study indicated that attachment anxiety was associated with anger. Specifically, attachment anxiety was associated with an overall disposition to experience anger, a high degree of internalising anger and lack of anger control.

Bowlby (1988; 1973) viewed the initial function of anger as an attempt to restore a lost attachment by alerting the partner to unsatisfied attachment needs. In Bowlby's view, anger becomes dysfunctional when its expression serves to alienate the attachment other. Dutton (1995a) argues that this is what happens during the tension building phase of the cycle of violence. He suggests that the attachment yearning, characteristic of individuals with high attachment anxiety, leads to a psychological "arching away", that includes emotional distancing and ruminative critical thinking (anger-in), which serves to weaken relational bonds and further alienate the partner (Mikulincer, 1998). This withdrawal leads to greater alienation and eventually to an outbreak of physical abuse as a tension-draining device (Dutton, 1999).

A number of researchers have identified an association between couple violence and withdrawal from conflict, using both self-report and observational methods. Couple violence is positively linked to high levels of withdrawal both concurrently and longitudinally (Smith, Vivian O'Leary, 1991; Lloyd, 1990).

#### 4.2.4. Additional analysis

No specific predictions were made regarding attachment avoidance however additional analysis revealed that both the domestically violent men and the extra-domestically violent men reported significantly higher attachment avoidance than the non-violent control group. Attachment avoidance was also found to be associated with interpersonal jealousy, trait anger, internalised anger and anger expression as well as verbal aggression and physical aggression in intimate relationships.

These findings are consistent with the literature reporting that internal working models about the self and others can influence later development of psychopathology (Jones, 1996). Many of the correlates of violence include childhood experiences such as witnessing family violence at home, childhood sexual, physical and emotional abuse and childhood neglect (Sorenson et al, 1996; Emery and Laumann-Billings, 1995). The literature suggests that such experiences lead to an

internal working model that views others as unavailable, untrustworthy and unresponsive as attachment figures (Goodyear-Smith and Laidlow, 1999; Sorenson et al, 1996; Elliott, 1994), leading to avoidance of or fear of close relationships and chronic frustration of attachment needs (Bartholomew, 1990).

However, due to the distribution of scores on the attachment dimensions, only 6.5% of participants presented with an "avoidant" attachment style, which is significantly lower than the distribution found in the general population norms (Brennan, Clark and Shaver, 1998). Therefore, the majority of participants who reported high attachment avoidance also reported high attachment anxiety, i.e. both desiring and fearing intimate relationships. These findings could therefore simply be a reflection of those found due to the effect of attachment anxiety.

Due to the nature of the statistical analysis used, the interaction effect of attachment anxiety and attachment avoidance could not be investigated. It is suggested that future research looking at this may well be of interest.

#### 4.2.5. Summary.

The results of this study indicated that violent men demonstrated predominately insecure attachment styles, with a high proportion of these men being either preoccupied or fearfully attached (characterised by anxiety about intimate relationships). Theoretically, insecure attachment styles are reported to have their roots in childhood attachment experiences with primary caregivers (Ainsworth et al, 1978; Bowlby, 1973), suggesting that many of the childhood correlates of violence, such as witnessing family violence, childhood abuse and neglect, may best be understood in terms of the long term effects on attachment relationships.

Attachment anxiety was strongly associated with interpersonal jealousy supporting the suggestion that the attachment system and the jealousy complex share the common function of maintaining relationships (Guerrero, 1998). Thus it could be hypothesised that individual differences in jealousy are likely to parallel individual differences in attachment style (Sharpsteen and Kirkpatrick, 1997). Consistent with the notion of the tension building phase of the "cycle of violence" both jealousy and attachment anxiety were associated with attempts to suppress anger and ruminative critical thinking. In the context of an intimate relationship, this pattern of anger

expression may be dysfunctional because it further alienates the attachment other. Withdrawal and alienation may eventually lead to an outbreak of physical abuse as a tension-draining device (Dutton, 1999). Supporting this suggestion, attachment anxiety was found to be associated with abusiveness in intimate relationships, with domestically violent men reporting a significantly higher degree of attachment anxiety than either of the other groups. This finding suggests that attachment anxiety may be an important factor in explaining violence in intimate relationships, however longitudinal studies are required to justify such a conclusion.

#### **4.3. Hypothesis Three: Social Comparison.**

The third hypothesis consisted of four parts, with the aim of investigating the role of social comparison on jealousy and abusiveness in intimate relationships.

##### **4.3.1. Hypothesis 3a.**

The results of this study provided limited support for the hypothesis that men who are abusive in intimate relationships will compare themselves more unfavourably to their peers than men who are not abusive.

Consistent with this hypothesis, verbal aggression in intimate relationships showed significant negative associations with all of the sub-scales on the social comparison scale, suggesting that men who compare themselves unfavourably to their peers are more likely to report being verbally aggressive in intimate relationships. Small but significant negative associations were found between the measures of physical abusiveness (physical aggression and severe violence) in intimate relationships and "group fit". This finding suggests that men who report to feel different to their peers and unaccepted by their peer group are more likely to report to be physically abusive in intimate relationships. Consistent with these findings, the results of this study also highlighted a significant difference between the domestically violent men and the non-violent comparison group on the measure of "group fit".

This finding is consistent with evolutionary theory that suggests that the ability to attract and maintain allies is critical to obtain positions of high rank (Gilbert, 1994; Chapais, 1992; Argyle, 1991). Brown and Lohr (1987) report that it is this concern that lies behind efforts to "fit in" and identify with a group, which in turn feeds self-esteem and self-identity. Rejection or

marginalisation from the peer group results in a loss of social support and also conveys powerful messages about one's relative position in a social group (Birtchnell, 1993.) Thus the evolved need for kinship and a sense of group membership is a salient rank issue (Gilbert, Price and Allan, 1995; Bailey, Wood and Nava, 1992; Bailey, 1988). It could be suggested that individuals who lack skills of affiliation and alliance building (*Social Attention Holding Power*), are more likely to use coercion, threats and physical violence (*Resource Holding Potential*) to regain a sense of faltering control and prevent further rejection (Campbell and Muncer, 1994).

The findings of this study are consistent with the literature reporting that violent/sexually violent men often demonstrate problems in establishing intimacy with adult partners and lack peer relationships, leading to loneliness and social isolation (Curtin and Niveau, 1998; Fraser, 1996; Marshall, 1994; Seidman, Marshall and Hudson, 1994). It is suggested that feelings of loneliness and intimacy deficits may make an individual vulnerable to the influences and circumstances that lead to offending (Marshall, 1994).

However, the conclusions that can be drawn from these findings are limited. Due to the methodology employed by this study, causation cannot be inferred. As a result, it cannot be determined whether the demonstrated group differences in "group fit" preceded the incidences of domestic violence, or whether men who are violent towards their partners are consequently rejected by their peers.

The results obtained in this study did not support the prediction that physical abusiveness in intimate relationships would be negatively associated with rank status and social attractiveness. It could be suggested that low rank status and social attractiveness per se, are not necessarily important factors when looking at violence within intimate relationships. Consistent with this suggestion, Silverman and Williamson (1997) reported that males who associate with abusive male peers and receive peer support for battering have an increased likelihood of using violence towards their female partners. Thus within certain peer groups, "high ranking" males are also likely to be abusive in intimate relationships. It is possible that even "high ranking" abusive males, within their current situation of being detained within a secure environment, may be less



likely to report having a peer group whom they feel similar to and accepted by. Research looking at the peer relationships of prison inmates suggests that few inmates report forming close relationships within the prison setting, placing more importance on relationships with people outside the prison (Batten, 1983).

It would therefore appear that both the presence of a peer group that endorses violence or the absence of a peer group, leading to feelings of rejection and alienation, may be risk factors in abusiveness towards intimates. Further research is therefore required to look at the influence of the peer group on abusiveness towards intimate partners. In addition longitudinal studies are required to examine the temporal relationships between peer rejection and abusiveness in intimate relationships.

#### 4.3.2. Hypothesis 3b.

The results obtained in this study provided limited support for the hypothesis that low social comparison would be associated with higher levels of interpersonal jealousy.

A small but significant negative association was found between interpersonal jealousy and group fit. This finding suggests that men who perceive themselves to be different to and unaccepted by their peer group report higher levels of interpersonal jealousy than men who perceive themselves to be similar to and accepted by their peer group. This is consistent with the notion of the self-fulfilling prophecy of rejection sensitivity and rejection, which proposes that individuals who perceive themselves to be socially unaccepted or rejected tend anxiously to expect and readily perceive rejection in the ambiguous behaviour of others (Downey et al, 1998; Downey and Feldman, 1996). It is perhaps unsurprising that such individuals report intense emotional reactions to situations where there is a potential threat of rejection from an attachment figure, which ironically is suggested to actually increase the likelihood of the rejection occurring (Downey et al, 1998; Downey and Feldman, 1996). The finding that men who perceive themselves to be different to and unaccepted by their peer group report higher levels of interpersonal jealousy adds little to the understanding of any temporal relationship between them, if indeed a relationship exists. The literature on rejection sensitivity does however suggest a reciprocal relationship between anxiously expecting rejection and actually being rejected.

## *Discussion*

The results obtained in this study did not support the prediction that low rank status and social attractiveness would be associated with interpersonal jealousy. This is inconsistent with the suggestion that individuals who perceive themselves to be of lower rank and less socially attractive than their peers are more likely to fear the potential threat to an attachment relationship due to negative social comparison (Gilbert, Price and Allan, 1995; Solovey, 1991).

One possible explanation for this finding is that social comparison judgements are made about one's relative social standing compared to that of a potential rival, in order to judge the degree of threat posed to the attachment relationship by that particular person. Thus competitors who are perceived to be of a similar or higher rank are likely to pose more of a threat to the relationship and therefore be more likely to provoke jealousy (Pines and Friedman, 1998; Buss and Dedden, 1990). The interpersonal jealousy scale (IJS) presents participants with various situations, which are potentially jealousy provoking and asks them to rate the likelihood of a particular emotional response. It could be suggested that in the absence of any information about the competitor on which to judge one's relative social standing, participants are more likely to rate the situation as potentially jealousy provoking regardless their own perception of rank status and social attractiveness.

The results obtained in this study provided partial support for the hypothesis that low social comparison would be associated with anger.

Strong significant negative associations were found between group fit and anger-in and anger expression. This finding suggests that individuals who perceive themselves to be different to and unaccepted by their peers are likely to ruminate over angry feelings and express them indirectly, presenting a picture of a seething rage. This is consistent with the finding that individuals who perceive themselves to have been rejected internalise the rejection, e.g. "I have done something wrong" and are prone to excessive rumination (Downey and Feldman, 1996).

The results did not support the prediction that low social comparison would be associated with trait anger, which suggests that low rank status per se is not associated with a disposition to perceive a wide variety of situations as hostile. In addition there was no association found

between social comparison and anger-out, which refers to the degree to which anger is expressed towards others.

#### 4.3.3. Hypothesis 3c.

The results obtained in this study supported the hypothesis that low social comparison will be associated with higher levels of internalised shame.

Strong significant negative associations were found between all of the sub-scales on the social comparison scale and internalised shame. These findings are consistent with the literature that reports that the experience of shame is closely linked to the issue of rank status, supporting the argument that the evolutionary root of shame is to track social success and to alert the self to detrimental changes in social standing (Gilbert, 1997).

#### 4.3.4. Hypothesis 3d.

The results obtained in this study support the hypothesis that internalised shame will be associated with anger and abusiveness in intimate relationships.

Significant associations were found between all of the sub-scales on the anger scale and internalised shame. The associations found provide some interesting insights into how shame and anger may be related. More specifically, the associations found present a picture of shame prone individuals who have a tendency to perceive a wide range of situations as hostile and a tendency to suppress and ruminate over their angry feelings. This suggests that shame-prone individuals are prone to a seething, bitter, resentful kind of anger that they find difficult to express directly. This finding is consistent with Gilbert (1994) who reports that the hallmark of shame prone individuals is rumination and preoccupation with injury done to the self and fantasies of revenge. In addition internalised shame was also associated with anger-out which is the direct expression of anger towards others. Lewis (1971) and Scheff (1987) have suggested that the acute pain of shame can lead to a sense of "humiliated fury" not only directed towards the self, but also to the real or imagined disapproving other. Anger directed towards others is viewed as an attempt to regain a sense of agency and control which is lost in the shame experience.

The findings obtained in the present study are consistent with those of Tangney et al (1996), who found that shame-prone individuals experienced more anger than their less shame-prone peers.

Shame was associated with malevolent and fractious intentions and the likelihood of engaging in all manner of direct, indirect and displaced aggression.

Consistent with the notion of "humiliated fury" directed towards other, the results obtained in this study demonstrated significant associations between internalised shame and all of the sub-scales measuring abusiveness in intimate relationships; verbal aggression, physical aggression and severe violence.

Shame involves a global negative evaluation of the entire self, with corresponding feelings of worthlessness and inadequacy (Tangney et al, 1996). These low status signals create an experience of powerlessness to have the desired impact on others and elicit from them desired interactions (Goldner et al, 1990). Shame converts into rage, in what Scheff (1987) called the "shame-rage spiral", in an attempt to protect the self from what subjectively feels like looming annihilation. Shame induced rage is reported to be increased if a put down or loss of status occurs in front of an audience or if a person's reputation or status is damaged or undermined. Thus rage is viewed as a defensive manoeuvre against injury to the self in an attempt to "save face" (Retzinger, 1997, 1991; Gilligan, 1996; Gilbert, 1992).

Within the context of an intimate relationship the themes of powerlessness to elicit desired interactions from one's partner and the consequent feelings of rejection and humiliation are strongly evoked (Goldner et al, 1990). The findings obtained in this study are consistent with the literature that reports the prominence of shame in marital quarrels, relationship dissatisfaction and violent relationships (Retzinger, 1997; Lee, 1993; Lansky, 1987).

Supporting these finding the results of this study found a significant difference between the domestically violent men and the non-violent comparison group on self-reports of internalised shame, indicating that men who are abusive in intimate relationships report higher levels of internalised shame than men who are not abusive. The mean scores indicated that the domestically violent men reported higher levels of internalised shame than the extra-domestically violent men did, however this difference was not significant. This finding could be reflective of the fact that some of the men in the extra-domestically violent group self-reported abusiveness in

intimate relationships albeit to a lesser degree, hence the differences between these two groups may have been quite small. In addition, Gilbert (1992) reports that shame may generally lie behind many acts of violence not just those perpetrated within intimate relationships. He reports that many violent men are extensively shame-prone and sensitive to their image and its acceptance (Gilbert, 1994). Gilligan (1996) in his recent book on violent offenders talks about the obsession with respect within the prison culture. Gilligan believes that many serious acts of violence are provoked by feeling shamed, disrespected and ridiculed and are attempts to undo "loss of face".

Theoretically, internalised shame is a response to prolonged shaming experiences, which are reported to have begun in childhood (Dutton, 1999; Lewis, 1992). Shaming experiences in childhood, e.g. public humiliation, random punishment and verbal or behavioural attacks on the global self, have been found to generate life-long shame-proneness (Dutton, 1999; Andrews and Hunter, 1997; Dutton et al 1995). Therefore it is likely that internalised shame has primacy to any variable associated with it. The literature would suggest that shame precedes rage responses. However, it is possible that the experience of committing and being convicted of a serious violent offence against an intimate partner, within the context of widespread social disapproval of violence towards women is shame inducing (Archer, 1999). In reality, it is possible that the shame experiences of domestically violent men incorporate both of the above scenarios.

#### 4.3.5. Summary.

The results of this study looking at social comparison in jealousy and abusiveness in intimate relationships, are to some extent contradictory to the literature (Gilbert, Price and Allan, 1995; Salovey, 1991) and therefore it is difficult to draw clear conclusions.

The findings suggest that rank status per se is not associated with either jealousy or abusiveness. However, the results do suggest that men who perceive themselves to be different to and unaccepted by their peer group report higher levels of internalised anger, jealousy and abusiveness in intimate relationships. It is possible that individuals who lack skills of affiliation and alliance building, and hence feel alienated from others, are more likely to use tactics such as

intimidation, coercion and physical violence in an attempt to prevent further rejection. Within peer groups that endorse violence, high rank status may be achieved through such tactics.

The finding that internalised shame is associated with low social comparison, anger and abusiveness in intimate relationships may provide a link between rank status and abusiveness. Shame is reported to have evolved to alert the self to detrimental changes in social standing. It could be suggested that even high-ranking individuals experience shame in situations that are likely to challenge their reputation and social standing. The literature on the shame-rage spiral suggests that shame quickly converts into rage in an attempt to protect one's reputation (Retzinger, 1997; 1991). Thus, high-ranking individuals, especially if they have gained their rank status through aggressive acts, may also be abusive in intimate relationships if a threat to that relationship would result in a detrimental change to their social standing. Thus anger and abusiveness can be viewed as an attempt to ward off perceived attacks and "save face" in the face of threats to an attachment relationship (Retzinger, 1991).

Theoretically, both attachment anxiety and internalised shame have their origins in childhood experiences. It is possible that the internal working model of the self that is characteristic of high attachment anxiety could be conceptualised as a shame-based model, thus revealing the intricate connection of internalised shame and attachment anxiety with feelings alienation and rejection. The above suggestions are tentative and further research is required to support these hypotheses.

#### **4.4. Hypothesis Four: Experiences in Adolescence.**

##### **4.4.1. Hypothesis 4a**

The results of the study provided partial support for the hypothesis that men who are abusive in intimate relationships will report a low rank status in adolescence.

Abusiveness in adult intimate relationships was found to be associated with low social rank in adolescence. In particular there was a relationship between abusiveness in adulthood and physical strength and size, lower academic ability and feeling different to and unaccepted by the peer group in adolescence. In addition there was a significant difference between both groups of violent men and the non-violent control group, in that the violent men reported to have felt inferior to their peers in terms of academic ability and felt different to and unaccepted by their

peer group. However, there was no significant difference between the domestically violent men and the extra-domestically violent men, thus these findings may relate to aggressive and violent behaviour in general.

These findings are consistent with the findings of the research looking at "unpopular" children or children who are rejected by their peer group (Rodkin, Farmer, Pearl and Van Acker 2000; Morison and Masten, 1991; Newcomb and Bukowski, 1983; Coie, Dodge and Coppotelli, 1982). The literature reports that acceptance by peers is an important predictor of later psychopathology and competence (Bagwell, Newcomb and Bukowski, 1998; Morison and Masten, 1991; Hymel, Rubin, Rowden and LeMare, 1990). The link between aggression and children rejected by their peers has been the prominent focus in the peer relations literature with many studies highlighting that children who are rejected by their peers are those which display high levels of aggression (Miller-Johnson et al, 1999; Glad, 1998). Many of the men interviewed reported high levels of aggression in childhood and adolescence.

*" I was always in fights. I used my fists to get my own way, it was my way of dealing with things, always had been. "*

*"I was always in fights, I had fought a lot since I was little."*

The presence of multiple, distinct peer groups may provide children with a variety of social niches through which popularity can be achieved. These niches may be particularly consequential for boys with high levels of anti-social behaviour. Antisocial peer groups provide validation to its members for oppositional behaviour. A large body of evidence indicates that aggressive and anti-social children are more accepted and have higher status if they form peer groups with other aggressive children (Rodkin, Farmer, Pearl and Van Acker 2000; Dishan, Andrews and Crosby, 1995; Boivin, Dodge and Coie, 1995; DeRosier, Cillessen, Coie and Dodge, 1994). Thus similarity has a powerful effect on status (Cairns et al, 1988, Gilbert, Price and Allan, 1995; Wright, Giammarion and Parad, 1986).

Within this group they may gain functional support and hence increase their perception of their own rank status, but still be aware of their rejection by other children (Rodkin, Farmer, Pearl and Van Acker 2000).

Information obtained from the interviews with the violent men in the present study suggested that many of them sought out an aggressive, antisocial peer group, and increased their sense of status within this group through antisocial activities.

***" I was always in trouble at that age, and younger. Mostly for fighting, but also for twocking (Taking Without Owners Consent) and stealing, petty things really. I also got done for breach of the peace and indecent assault. I didn't tell my mates about the indecent assault, you wouldn't get respect for that, but I did get respect for taking cars. Basically the bigger the car the more respect you got. The more daring you were, the more respect you got."***

***"I was a little bastard, I caused absolute mayhem. I was in a gang and I was always in fights, stabbing people, slashing people. I was very popular within that gang, but the other kids were scared of me, I think they thought I was mental."***

Although this study did not look at the risk factors for peer rejection in childhood and adolescence, the literature consistently reports that childhood physical, sexual and emotional abuse are related to peer rejection in childhood and adolescence (Duncan, 1999; Glad, 1998; Levendosky, Okun, and Parker, 1995). Other risk factors include, childhood depression, childhood poverty and neglect (Levendosky, Okun, and Parker, 1995), and childhood bully victimisation (Duncan, 1999). Qualitative data obtained from the interviews provided some support for the findings in the literature.

***" I felt different at that age because of the abuse, I felt I was abnormal. It was something that I would never deal with and it made me feel like a freak."***



***" I was frightened all the time at that age. I didn't trust anyone. I didn't have any friends. I was being sexually abused at that time, I had been since I was very young... I didn't trust anyone, I was always wondering what they were after."***

***" I wasn't shy but I wasn't very popular. I was in a children's home at that age and I felt different to other children. That made me quite depressed. I used to cut up a lot. I slashed my wrists when I was 15."***

***" I got picked on and bullied a lot at school. I think it was because my appearance was bad, my clothes weren't right and I was dirty. I brought myself up. I was shy with people my own age and I didn't fit in."***

Many studies have reported that rejected children demonstrate the lowest levels of cognitive abilities, problem solving skills and very limited social abilities to achieve interpersonal goals and maintain positive social relations (Newcomb, Bukowski and Pattee, 1993). This is consistent with the findings that low academic ability and feeling different to and unaccepted by peers was related to abusiveness in intimate relationships. Morison and Masten (1991) in their longitudinal study found that aggression and disruption were negatively associated to academic performance in school. However, when these children were initially assessed in elementary school, the relationship between academic performance and disruption and aggression was not found. The emergence of a negative relationship over time suggests that a persistent pattern of disruptive and aggressive behaviour may eventually interfere with academic performance and /or academic problems may contribute to the maintenance or escalation of aggressive-disruptive behaviour (Patterson and Bank, 1989; White, Moffitt and Silva, 1989).

***"I think I was quite clever really, well certainly at least average but I couldn't be bothered with it. I got no exams. I was desperate to be outside of the classroom. Me and another lad used to bunk off school and go shoplifting, we would get a little following going who would come shoplifting too, but I was the best at it."***

***"Academically I didn't do very well, I didn't really go to school I was always truanting. Anyway I was expelled from school at 14, the head teacher got shot and I was blamed, it wasn't me though."***

The results of this study indicated that there was a relationship between the perception of being smaller and physically weaker than peers in adolescence and abusiveness in adult intimate relationships. This finding may be reflective of physical size and strength in males being a desirable quality and hence being a factor in overall physical attractiveness (Ruby, 1998; Bulcroft, 1991). Boys who are rejected by their peers are less likely to be perceived as being physically attractive which is likely to involve characters such as physique and perception of strength (Rodkin, Farmer, Pearl and Van Acker, 2000).

Physical size and strength in males is also reported to be important in terms of estimations of comparison judgements with relative size and strength being reported to be a signal of *Resource Holding Potential* (Gilbert, 1995, Krebs and Davies, 1993). It is possible that men who perceive themselves to be smaller and/or weaker than their peers use other strategies to compensate for this in an attempt to gain and / or maintain rank status. This is consistent with the research finding that indicates that males possessing the physical characteristics reflective of physical dominance and fighting ability are actually less likely to be aggressive (Schaal, Tremblay, Soussignan and Susman, 1996). Qualitative data obtained from the interviews with violent men provided some support for this suggestion.

***"You didn't have to be big for people to be scared of you, you just had to be crazy."***

***"I was smaller than most lads... Its funny thinking about the leaders of the gang, it's almost hard versus dangerous. I don't think I was hard so I had to be dangerous. I was really unpredictable... I don't think that the people in my gang were that scared of me, although they did think I was a lunatic."***

*" I wasn't very big but it was about attitude rather than size, what you were willing to do, knock someone down and keep going. "*

#### 4.4.2. Hypothesis 4b

The results of this study provided some support for the hypothesis that reported low rank status in adolescence would be associated with continued low social comparison in adulthood.

This finding is consistent with the literature on the stability of dominance ranks. Weisfeld (1994) reports that dominance ranks, especially amongst boys, are unusually stable, demonstrating significant stability from childhood to adolescence and onto adulthood. (Bagwell, Newcomb and Bukowski, 1998; Loeber and Stouthamer-Loeber, 1987; Loebar, 1982).

Interestingly there was no association between early pubertal maturity, shyness and academic ability in adolescence and continued rank status. Much has been made of the suggestion that early pubertal maturity is associated with dominance, popularity and other desirable traits (Schaal, Tremblay, Soussignan and Susman, 1996; Lang, 1994). However, research also indicates that dominant status seems to be more closely tied to athletic ability and physical attractiveness than to early maturity in adolescent boys (Rodkin, Farmer, Pearl and Van Acker, 2000). Weisfeld (1994) suggests that early maturity is probably a derivative associated with strength, attractiveness and athletic ability and as such does not directly cause high social status.

The finding that shyness in adolescence was not associated with continued low social comparison is consistent with the finding by Caspi, Elder and Bern (1988). In a longitudinal study they found that while childhood shyness was associated with greater difficulty or delay in males in the developmental tasks of early adulthood such as entry into a stable career and marriage, it did not predict later adjustment problems.

Rodkin, Farmer, Pearl and Van Acker (2000) reported that popular pro-social boys typically have above average academic ability. However consistent with the compensatory hypothesis (Coie, Finn and Krehbiel, 1984), academic ability does not have a direct effect on rank status. Coie, Finn and Krehbiel (1984) report that reduced academic ability can be compensated for by other positive social traits, such as sociability, athleticism and/or physical attractiveness.

## ***Discussion***

The results of this study provided some limited support for the hypothesis that "low rank" status in adolescence will be associated with internalised shame in adulthood. Specifically the perception of feeling different to or unaccepted by the peer group was associated with internalised shame in adulthood. This is consistent with the literature that reports that internalised shame is associated with feelings of worthlessness and inadequacy (Tangney et al, 1996).

Theoretically, internalised shame is thought to be a response to prolonged shaming experiences, which begin with early parent-child interactions. This finding is thus consistent with the qualitative data obtained, which indicated that many of the men reported traumatic childhood experiences such as witnessing family violence, childhood abuse and neglect. It could be suggested that traumatic childhood experiences results in the development of a "shame-based" internal working model of the self (Dutton, 1999). An internal working model of the self that is "shame-based" is likely to involve global attacks on the self which could lead to feelings of alienation from others. In support of this suggestion, Feldman and Downey (1994) found that childhood exposure to family violence and rejection is associated with heightened sensitivity to rejection. Further research is required to investigate any possible links between traumatic childhood experiences, childhood rejection by peers and internalised shame.

The study of experiences in adolescence of violent men was essentially an investigatory study, which has highlighted some interesting areas for future research.

### **4.4.3. Summary.**

Overall, the findings provided limited support to the suggestion of the stability of dominance ranks, and implicated a relationship between feeling different to and rejected by one's peer group in adolescence and internalised shame.

The findings indicated that low academic ability, the perception of being smaller and weaker than peers, and feeling different to and unaccepted by the peer group in adolescence, was related to abusiveness in adult intimate relationships. However, this finding must be interpreted with some caution as it is possible that rather than relating specifically to violence in intimate relationships, this reflects an increased level of generalised violence as it does not differentiate between domestically violent and extra-domestically violent men.

#### **4.5. Strengths of the Study.**

The clear theoretical underpinnings of the model of romantic jealousy being investigated, was a strength of this study. This has highlighted areas for future research with respect to the role of attachment factors, the influence of the peer group and internalised shame in the experience and expression of romantic jealousy, as well as highlighting possible risk factors for abusiveness in intimate relationships, which merit further investigation.

This study improved on the methodology of Pistole and Tarrant (1993) with the inclusion of a non-violent comparison group. The presence of a violent and a non-violent comparison group was an additional strength of this study.

Previous research in the field of domestic violence has highlighted that measuring violence within intimate relationships is problematic, due to the under-reporting of violence by perpetrators (Archer, 1999; Foshee, 1996). In attempting to address this issue, this study was strengthened in two ways. Firstly the availability of information held on patient's files enabled information to be obtained regarding any known history of violence within intimate relationships. Secondly, the inclusion of a measure of social desirability enabled preliminary analysis of the validity of the self-reports of abusiveness in intimate relationships to be conducted.

The use of dimensional measures of attachment dimensions, rather than categorical measures, resulted in the identification of significant differences between the domestically and the extra-domestically violent men which would not have been found using a categorical approach. Furthermore, very few studies have reported using multiple self-report measures to assess reliability within their sample, relying instead on previous reports of the measure's reliability.

Gilbert (1994) reports that many forms of adult pathology relate to a history of abuse and thus argues that targeting male violence is of huge clinical importance. The applied nature and clinical implications of this study is one of its major strengths. The following section will discuss the clinical implications of this study. Following which the limitations of the study will be discussed and suggested areas for future research.

#### **4.6. Clinical Implications.**

The results of this study indicate that attachment theory may provide a meaningful framework from which to understand individual differences in the experience of jealousy and abusiveness in intimate relationships. In particular, this study demonstrated that domestically violent men report a significantly higher degree of attachment anxiety relating to an internal working model that views the self as unworthy of love.

Ward, Hudson and Marshall (1996) highlight the importance of identifying the romantic attachment style and its associated beliefs when assessing the intimacy deficits in violent offenders. The intimacy problems faced by men who are abusive in intimate relationships are likely to be characterised by fears of rejection and attempts to cultivate "safe" relationships. Attachment theory suggests that in working therapeutically with individuals with high attachment anxiety, interventions should include the development of a "secure base" (Dozier, Cue and Barnett, 1994) and the five therapeutic tasks outlined by Bowlby (1988, pp. 138-139). This provides individuals with an opportunity to incorporate these interpersonal experiences into their internal working models challenging their expectations of the self, others and relationships, which may alter their adult attachment style (Clegg and Lansdall-Welfare, 1995; Egeland et al, 1988).

Within a secure hospital, both individual therapy and day-to-day interactions with staff provide potentially powerful experiences that can facilitate the re-working of internal working models. These issues have important implications for the management of relationships between staff and therapists with patients. Patients within secure hospitals often exhibit extreme behaviours, such as self-harm and assaults on staff, or develop intense relationships with therapists or staff members. These behaviours may be understood as insecure attachment behaviour, where by the patient is repeating insecure patterns of attachment behaviour or re-enacting earlier traumatic rejection and abuse (Van der Kolk, 1989). Such behaviours often lead to rejection of the patient by staff and the termination of individual therapy, which may serve to reinforce internal working models. Attempts to work through these difficulties may provide a powerful opportunity to challenge patient's insecure internal working models (Clegg and Lansdalt-Welfare, 1995). This

has important implications for staff training needs, supervision and the model of therapeutic interventions used.

The association between attachment anxiety with jealousy and abusiveness in intimate relationships provides a clinical hint at the origins of abusive relationships. Dutton, van Ginkel and Landolt (1996) report that the abusive personality has its origins in attachment insecurity and prolonged shaming experiences. They suggest that the attachment origins of the abusive personality make it especially sensitive to uncontrollable rejection or abandonment and can produce pathological reactions to separation and estrangement.

The significant associations between internalised shame and abusiveness in intimate relationships is consistent with the literature suggesting that many violent men are extensively shame-prone (Gilbert, 1994; 1992). This finding suggests that when working with men who have been abusive towards their partners an important factor of treatment will be recognising and working with shame.

Wallace and Nosko (1993) advocate group therapy as an effective technique for working with shame-prone individuals because of the safety and co-confessional aspects of group work. Such interventions need to be conducted with extreme caution, as the exercise of confession, typical in most treatment groups, can itself be shame inducing. Current evidence indicates that trying to shame antisocial people out of adverse behaviour may only compound the problem, leading to an increase in rage, competitiveness and narcissistic styles and a desire to reduce levels of shame and improve one's status again (Gilbert, 1994; Broucek, 1991). Shame at best will lead to fearful compliance and secretiveness, not developments of compassion or efforts at reparation (Gilbert, 1992, 1989). Interventions with violent men need to make a clear theoretical distinction between guilt and shame to ensure that treatment packages are not attempting to use shame as a method of changing people.

Consistent with the suggestion that acceptance by peers is an important predictor of later psychopathology and competence (Bagwell, Newcomb and Bukowski, 1998), the results of this

study indicated that compared to the non-violent comparison group, both groups of violent men reported to have felt different to and rejected by their peer group in adolescence. The literature consistently reports that peer rejection in childhood and adolescence is related to traumatic childhood experiences such as abuse and neglect (Duncan, 1999; Glad, 1998). These findings highlight the importance of the Government's focus on initiatives to improve care for children identified as being at risk of the development of later psychopathology and adjustment difficulties. Changes to improve care for looked after children were announced in the Government's White Paper Modernising Social Services (1998), leading to the launching of a three year program, Quality Protects, designed to improve the management and delivery of children's services. Quality protects emphasises the importance of social services, health and education working in partnership to provide holistic care for at risk children.

The results of this study indicated that violent men reported to have felt less academically able than their peers in adolescence. The literature reports that, unlike popular antisocial children, rejected children lack positive qualities to balance their aggressive behaviour and are viewed as having difficulties in the areas of sociability and cognitive abilities (Newcomb, Bukowski and Pattee, 1993; Dodge, Schlundt, Schocken and Delugach, 1983). Such findings suggest that children at risk of being rejected from their peers may benefit from social skills training and support with educational difficulties. Coie, Finn and Krehbiel (1984) for example found that academic skills training resulted in improved social preference ratings of rejected children.

#### **4.7. Limitations of the study.**

##### **4.7.1. General Limitations**

This study was limited in several ways. Firstly, the study had a small sample size limiting the statistical analysis. In particular the small sample size prevented more powerful statistical analysis of the relationships between jealousy, attachment dimensions, social comparison and internalised shame (e.g. multiple regression). The use of non-parametric statistics, determined in part by the sample size, also meant that the interaction effects of attachment anxiety and attachment avoidance could not be investigated. Furthermore a larger sample size may have revealed differences of smaller effect size.



## ***Discussion***

The extent to which the findings of this study can be generalised to other populations are limited. As in any research, men who self-select to participate in a study (whether from a secure hospital or the community), may not be representative. Given the highly selected nature of the domestically violent participants within this study, there are limits to the generalisability of the results obtained by this sample of violent offenders to other samples of male batterers. Megargee (1966) reported that "over-controlled" offenders are expected to attack others rarely, but with extreme intensity. It is possible that in a sample of convicted male offenders, who have been extremely assaultive, there is a higher proportion of "over-controlled" offenders, presenting with a high degree of internalised anger. However, as there was no significant difference between the three groups on internalised anger, the results would suggest that this finding relates to the experience of jealousy rather than being an idiosyncratic characteristic of the violent offenders who participated in this study.

The distinction between domestically and extra-domestically violent men on the basis of a conviction against an intimate partner, although clear and operationally useful, is a crude distinction and is likely to have limited the conclusions that can be drawn from this study. Attempts were made to corroborate this distinction through reports of any known domestic violence held on the patient's file. In addition the Conflict Tactics Scale revealed significant differences between the groups on levels of abusiveness. However, the fact that some of the extra-domestically violent men self-reported violence in intimate relationships suggests that this may have confounded some of the results. Future research with larger sample sizes may consider using the Conflict Tactics Scale as a screening measure to determine the presence of violence within intimate relationships.

A limitation of the present study, along with the majority of research in this area, is that it was cross-sectional and looked at associations between the dependent variables, thus causation cannot be inferred. Theoretically, both attachment and internalised shame have their roots in childhood experiences and are therefore, likely to have primacy to any variables associated with them. However, attachment anxiety, peer rejection and internalised shame have yet to be linked longitudinally with abusiveness in intimate relationships and it is therefore difficult to justify a

conclusion that these factors drive violence in couple relationships. To resolve such issues, future researchers must conduct longitudinal studies to examine the temporal relationships between these factors.

Another limitation to the study is that the findings are based on self-report measures. Of particular relevance is the measure of rank status in adolescence, which relied solely on retrospective recall. Although there is concern over the reliability of adult memories of earlier experiences, Brewin et al (1992) reported that recall is less biased by mood effects and more reliable and consistent than is sometimes thought. They conclude that although improved methodologies are needed to explore the impact of early experiences in childhood and adolescence on subsequent adult psychopathology, the use of recall remains a valid and useful approach. Future researcher may need to use observational techniques to clarify the findings with greater certainty.

#### 4.7.2. Measurement of Interpersonal Jealousy.

A further possible limitation of the present study is the suggestion that the Interpersonal Jealousy Scale may not have clearly differentiated between normal reactive jealousy and pathological responses to jealousy provoking situations.

The Interpersonal Jealousy Scale (IJS) presents participants with various situations which are potentially jealousy provoking and asks them to rate the likelihood of a particular emotional response. The IJS thus captures an individual's propensity to judge relatively ambiguous events as likely to cause an emotional reaction, and as such should differentiate between individuals who are vigilant to signs of abandonment or rejection.

However, White and Mullen (1989) define romantic jealousy as, "a complex of thoughts, emotions and actions" (White and Mullen, 1989, pp.9). It could be suggested that in failing to look at the behavioural response ("actions"), the IJS does not identify pathological reactions to such situations.

This suggestion highlights the conceptual difficulties faced by researchers in the area of romantic jealousy. It is suggested that future research investigating individual experiences of jealousy focus

on the emotional, cognitive and behavioural responses to potentially jealousy provoking situations in order to distinguish more clearly between normal and pathological reactions to such situations.

#### **4.7.3. Measurement of Attachment Dimensions.**

One of the limitations of the present study is that it relied solely on a self-report measure of attachment in romantic relationships. It has been found that troubled adults have a tendency to reflect incoherently on their attachment experiences, overestimating the degree of secure attachment (Main, 1991). Furthermore, research has found that high levels of defensiveness and distortion were particularly common amongst sex offenders (Murphy, 1990), which would represent a significant proportion of the domestically and extra-domestically violent men. This suggests that the self-report methods of assessing romantic attachment style may have resulted in the under-reporting of insecure attachments. In addition, anecdotal evidence suggests that some participants may have sexualised items on the ECR, particularly items relating to the avoidance sub-scale, thus skewing the data. Further research is required to investigate this suggestion and any implications this may have on self-report measurement of attachment styles in romantic relationships.

#### **4.8. Areas for Future Research.**

The results of this study have highlighted the potential that attachment theory may have in providing an explanatory model of romantic jealousy leading to abusiveness. Further research is required to support the suggestion that individual differences in the experience and expression of romantic jealousy parallel individual differences in attachment "style".

It could be suggested that attachment avoidance, relating to the internal working model that views others as untrustworthy and unreliable, may also relate to the experience of intimate anger and hence contribute towards abusive relationships. Studies with larger sample sizes enabling more sophisticated statistical analysis would enable the interaction effects of attachment anxiety and attachment avoidance on jealousy and abusiveness to be investigated.

The use of continuous measures of attachment dimensions is still in its infancy and further research on the validity of such measures are required. Anecdotal evidence from this study

suggests that some of the participants may have sexualised some of the items on the Experience in Close Relationships questionnaire, thus skewing the data. Research is required to confirm this and to establish if the sexualisation of the need for security and affection is idiosyncratic to male violent offenders.

It has been suggested in the present study, that the internal working model of the self, characteristic of attachment anxiety, is a "shame-based" model involving global attacks on the self. Further research investigating the association between attachment anxiety and shame could have implications for intervening with such individuals. Theoretically, a temporal relationship between attachment anxiety and internalised shame with abusiveness in intimate relationships is suggested. However longitudinal studies are required to justify the conclusion that in the context of a threat to an attachment relationship, these factors drive intimate violence.

Research looking at individual's experiences in peer groups has focussed almost exclusively on children and adolescents. However it seems possible that the influence of the peer group extends beyond this stage (Bagwell, Newcomb and Bukowski, 1998). It has been suggested that men who lack the skills of affiliation and alliance building are more likely use intimidation and physical violence to achieve interpersonal goals. Future research investigating the social-skills deficits of violent men could have important implications for violence prevention programmes and intervention strategies with violent men.

Further research is needed to look at the experience of violent men in adolescence, with a particular focus on the experience of being rejected by the peer group and the possible strategies employed by males who perceive themselves not to possess the physical characteristics signalling high Resource Holding Potential. The difficulties that rejected children have been reported to have in the areas of sociability and cognitive abilities has received scant attention in the literature (Newcomb, Bukowski and Pattee, 1993), and future research in this area could have huge implications for intervention with these children. Future research would benefit from longitudinal studies of normative samples as a more robust methodology to investigate some of the areas suggested in this study.

## **5.0. Conclusions.**

The aim of this study was to investigate the experience of romantic jealousy in a group of men who have committed serious offences against an intimate partner. The study drew on evolutionary theory, specifically looking at attachment theory and social comparison processes to account for individual differences in the experience of and violent expression of romantic jealousy.

Overall the results of the study supported the hypothesis that attachment anxiety is associated with jealousy, anger and abusiveness. In particular the results highlighted the association between internalised anger and jealousy, presenting a picture of a seething rage. Internalised anger and lack of anger control was found to be predictive of jealousy in intimate relationships. Mixed support was provided for the role of social comparison processes, with the results highlighting the perception of feeling different to and unaccepted by one's peer group in both adolescence and adulthood. These findings are consistent with the notion of rejection sensitivity (Downey and Feldman, 1996), and it is suggested that the internal working model of the self, characteristic of attachment anxiety, leads individuals anxiously to expect and readily perceive rejection.

The finding that internalised shame was associated with jealousy, anger and abusiveness in intimate relationships, may provide the link between rank status and abusiveness. Shame is reported to alert the self to detrimental changes in social standing, regardless of rank status. Anger and abusiveness can be viewed as an attempt to "save face". It is suggested that the internal working model of the self, characteristic of attachment anxiety is a "shame-based" model, involving global attacks on the self, revealing the intricate connection with feelings of alienation and rejection.

Theoretically the development of internal working models have their origins in early childhood experiences, providing a clinical hint at the origins of the abusive personality. Further research is required to support these suggestions.

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## **Appendix. 1.**

### **Letter of Ethical Approval.**

Our Ref: PB/EM

11 August 1999

Miss Jeanette Allen  
[REDACTED]  
[REDACTED]  
[REDACTED]

Dear Miss Allen

**The Role of Attachment Style and Social Comparison in the Development of Male Sexual Jealousy, Leading to Abusive Acts Against Intimates/Ex Intimates**

Thank you for submitting your proposal.

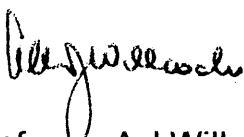
The Committee considered your proposal, which they found extremely interesting, at their meeting on 22 July 1999. It is assumed that the research will not involve Learning Disabled participants. Please confirm in writing that this is the case.

On receipt of such confirmation, Ethics Committee approval will be granted and your research may proceed.

Should any changes occur during this research, could you please ensure that you inform the Ethics Committee accordingly.

You are requested to forward a copy of your research upon completion of the project. Your nominated hospital link is Dr Mike Ferriter in the Research Department.

Yours sincerely



Professor A J Willcocks  
Acting Chairman

RET FORD  
NOTTS  
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CHAIRMAN

Mr Philip Champ

CHIEF EXECUTIVE

Mrs Sheila Foley



INVESTOR IN PEOPLE



**Appendix. 2.**  
**Patterns of Childhood Attachment.**

## **Patterns of Childhood Attachment.**

### **Secure.**

During the strange situation, the infant uses the caregiver as a "secure base", explores freely when the caregiver is available, may or may not be distressed at separation, but greets positively on reunion, seeks contact if distressed, settles down, returns to exploration. Displayed by 55-65% of the normative sample.

Secure infants are confident of the availability of their attachment figure and explore freely in his or her presence. They may or may not be overtly distressed by separations but will limit exploration in the caregivers absence.

### **Insecure-Avoidant.**

During the strange situation, the infant appears minimally interested in the caregiver, explores busily, minimal distress at separation, ignores or avoids caregiver on reunion. Displayed by 20-25% of the normative populations.

Avoidant infants have learnt that the attachment figure is unlikely to be available for comfort at times of need. To avoid potential rejection, they avoid expressing their attachment needs. Thus they appear precociously independent; though seemingly preoccupied with exploration; they explore less freely than do secure infants. They rarely show overt distress at separations and at reunions they ignore or avoid the caregiver for prolonged periods.

### **Insecure-Ambivalent.**

During the strange situation, the infant shows minimal exploration, preoccupied with the caregiver, has difficulty settling down, both seeks and resists contact on reunion, may be angry or very passive. Displayed by 15-20% of the normative population.

Resistant infants have learnt that the attachment figure is unpredictable; attention can be ensured only with a great deal of effort on their part and exploration is limited by preoccupation with the caregiver. They are extremely distressed by separations and often refuse to be comforted upon reunions.

### **Insecure- Disorganised.**

During the strange situation, the infant shows disorganised and /or disorientated behaviour in the caregivers presence (e.g., approach with head averted, trance-like freezing, anomalous postures. Displayed in 15-20% of the normative population.

### **Appendix. 3.**

#### **Hazan and Shaver's (1987) Three Adult Attachment Styles.**

## **Hazen and Shaver's (1987) Three Adult Attachment Styles.**

### **Secure.**

A secure attachment style is characterised by comfort with intimacy and an ability to depend on intimate partners. The most important love experiences are described as happy, friendly and trusting. They emphasis being able to accept and support their partner despite their partner's faults. Moreover, their relationship tended to endure longer.

"I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I do not often worry about being abandoned or about someone getting close to me."

### **Avoidant.**

An avoidant attachment style is characterised by fear of intimacy, emotional highs and lows and excessive self-reliance.

"I am somewhat uncomfortable being close to others. I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often partners want me to be more intimate than I feel comfortable."

### **Preoccupied.**

A preoccupied attachment style is characterised by obsession, desire for reciprocation and union, emotional highs and lows, extreme sexual attraction and jealousy, "preoccupation2 with attachment issues and as desiring more closeness than their partners are willing to allow.

"I find that others are reluctant to get as close as I would like. I often worry that my partner does not really love me or want to stay with me. I want to merge completely with another person and this desire sometimes scares people away."

## **Appendix. 4.**

### **Bartholomew and Horowitz's (1991) Four Adult Attachment Styles.**

## **Bartholomew and Horowitz's (1991) Four Adult Attachment Styles.**

### **Secure.**

A secure attachment style is characterised by a relatively positive model of the self and others, indicating a sense of worthiness (lovability) plus an expectation that other people are generally accepting and responsive.

"It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I do not worry about being alone or having others not accept me".

### **Preoccupied.**

A preoccupied adult attachment style is characterised by a negative model of the self and a positive model of others, indicating a sense of unworthiness (unlovability) combined with a positive evaluation of others. This combination of characteristics would lead a person to strive for self-acceptance by gaining the acceptance of valued others.

" I want to be emotionally intimate with others, but I often find that others are reluctant to get as close to me as I would like. I am uncomfortable being without close relationships, but I worry that others do not value me as much as I value them".

### **Dismissive-Avoidant.**

A avoidant adult attachment style is characterised by a relatively positive model of the self and a negative model of others, indicating a sense of love-worthiness combined with an expectation that others are untrustworthy and rejecting. Such people protect themselves against disappointment by avoiding close relationships and maintaining a sense of independence and invulnerability.

" I am comfortable without close emotional relationships. It is very important for me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me".

### **Fearful-Avoidant.**

A fearful adult attachment style is characterised by a negative model of the self and a negative model of others, indicating a sense of unworthiness (unlovability) combined with an expectation that others are untrustworthy and rejecting. Such people desire intimate relationships but are fearful of anticipated rejection by others.

"I am uncomfortable getting close to others, I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others".

## **Appendix. 5.**

### **The Conflict Tactics Scale (Straus, 1979).**

### **The Conflict Tactics Scale.**

No matter how well a couple get along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have arguments or fights because they are in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. Below are a list of some of the things that you may have done when you have had a dispute with your partner / ex-partner.

Please think about your experiences in romantic relationships and rate how many times, on average, you think you did each of the stated tactics below in the last year of your relationships.

		never	once	twice	3-5 times	6-10 times	11-20 times	20+ times	Don't know
a	Discussed the issue calmly								
b	Got information to back up your side of things								
c	Brought in or tried to bring in someone else to help settle things								
d	Insulted or swore at each other								
e	Sulked and / or refused to talk about it								
f	Stomped out of the room or house								
g	Cried								
h	Did or said something to spite your partner								
i	Threatened to hit or throw something at your partner.								
j	Threw or smashed or hit or kicked something.								
k	Threw something at your partner.								
l	Pushed, grabbed or shoved your partner.								
m	Slapped your partner								
n	Kicked, bit or hit with a fist								
o	Hit, or tried to hit with something								
p	Beat up your partner								
q	Threatened with a knife or a gun								
r	Used a knife or a gun.								



## **Appendix. 6.**

**The short form of the Marlowe-Crowne Social desirability Scale.  
(Reynolds, 1982).**

**MC-SDS- Short Version**

	<b>true</b>	<b>false</b>
1. It is sometimes hard for me to carry on with my work if I am not encouraged.		
2. I sometimes feel resentful when I don't get my way.		
3. On a few occasions I have given up doing something because I thought too little of my ability.		
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.		
5. No matter who I am talking to, I am always a good listener.		
6. There have been some occasions when I have taken advantage of someone.		
7. I am always willing to admit it when I have made a mistake.		
8. I sometimes try to get even rather than forgive and forget.		
9. I am always polite, even to people I don't like.		
10. I have never been annoyed when people have expressed a different view to my own.		
11. There have been times when I have been jealous of someone else's good fortune.		
12. I sometimes feel irritated by people who ask favors of me.		
13. I have never deliberately said something to hurt someone's feelings.		

## **Appendix. 7.**

**Experiences in Close Relationships Questionnaire (ECR).  
((Brennan et al, 1998).**

### **EXPERIENCES IN CLOSE RELATIONSHIPS.**

*Instructions:* the following statements concern how you feel in romantic relationships. We are interested in how you **generally** experience relationships, not just what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

Disagree strongly		Neutral / mixed			Agree Strongly		
1	2	3	4	5	6	7	
1. I prefer not to show a partner how I feel deep down.							_____
2. I worry about being abandoned.							_____
3. I am very comfortable being close to romantic partners.							_____
4. I worry a lot about my relationships.							_____
5. Just when my partner starts to get close to me I find myself pulling away.							_____
6. I worry that romantic partners won't care about me as much as I care about them.							_____
7. I get uncomfortable when a romantic partner wants to be very close.							_____
8. I worry a fair amount about losing my partner.							_____
9. I don't feel comfortable opening up to romantic partners.							_____
10. I often wish that my partners feelings for me were as strong as my feelings for her.							_____
11. I want to get close to my partner but I keep pulling back.							_____
12. I often want to merge completely with romantic partners, and this scares them away.							_____
13. I am nervous when partners get too close to me.							_____
14. I worry about being alone.							_____
15. I feel comfortable sharing my private thoughts and feelings with my partner.							_____
16. My desire to be very close sometimes scares people away.							_____
17. I try and avoid getting too close to my partner.							_____
18. I need a lot of reassurance that I am loved by my partner.							_____

Disagree strongly		Neutral / mixed			Agree Strongly	
1	2	3	4	5	6	7
19. I find it relatively easy to get close to my partner.						_____
20. Sometimes I feel that I force my partners to show more feeling, more commitment.						_____
21. I find it difficult to allow myself to depend on romantic partners.						_____
22. I do not often worry about being abandoned.						_____
23. I prefer not to be too close to my romantic partners.						_____
24. If I can't get my partner to show interest in me, I get upset or angry.						_____
25. I tell my partner just about everything.						_____
26. I find that my partner(s) don't want to get as close as I would like.						_____
27. I usually discuss my problems and concerns with my partner.						_____
28. When I am not involved in a relationship, I feel somewhat anxious and insecure.						_____
29. I feel comfortable depending on my romantic partners.						_____
30. I get frustrated when my partner is not around as much as I would like.						_____
31. I don't mind asking romantic partners for comfort, advice or help.						_____
32. I get frustrated if romantic partners are not available when I need them.						_____
33. It helps to turn to my romantic partner in times of need.						_____
34. When romantic partners disapprove of me, I feel really bad about myself.						_____
35. I turn to my partner for many things including, comfort and reassurance.						_____
36. I resent it when my partner spends time away from me.						_____

***Thank you!***

## **Appendix. 8.**

### **Relationship Questionnaire. (Bartholomew and Horowitz, 1991)**

## **RELATIONSHIP QUESTIONNAIRE.**

**Read each of the four self- descriptions below and place a tick next to the single alternative that best describes how you actually act and feel in romantic relationships or that comes nearest to describing you.**

**STYLE A:** It is relatively easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me. \_\_\_\_\_

**STYLE B:** I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely or to depend on them, I worry that I will be hurt if I allow myself to become too close to others. \_\_\_\_\_

**STYLE C:** I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them. \_\_\_\_\_

**STYLE D:** I am comfortable without close relationships. It is important for me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me. \_\_\_\_\_

## **Appendix. 9.**

### **The Interpersonal Jealousy Scale. (Mathes and Severa, 1981).**







## **Appendix. 10.**

### **The Social Comparison Scale. (Allan and Gilbert, 1995)**

## S.C.S.

Please circle a number at a point which best describes the way you see yourself in comparison to others.

*Example:*

*Short            1    2    3    4    5    6    7    8    9    10           Tall*

If you circled 5 (middle) this means you see yourself about average i.e. about the same as most people  
If you circled 3, this means that you see yourself as somewhat shorter than others; and circling 7, somewhat taller.

If you understand the instructions, please proceed. Circle one number on each line according to how you see yourself in relation to others.

• **In relationship to others I feel:**

Inferior	1	2	3	4	5	6	7	8	9	10	Superior
Incompetent	1	2	3	4	5	6	7	8	9	10	More competent
Unlikable	1	2	3	4	5	6	7	8	9	10	More likeable
Left out	1	2	3	4	5	6	7	8	9	10	Accepted
Different	1	2	3	4	5	6	7	8	9	10	Same
Untalented	1	2	3	4	5	6	7	8	9	10	More talented
Weaker	1	2	3	4	5	6	7	8	9	10	Stronger
Unconfident	1	2	3	4	5	6	7	8	9	10	More confident
Undesirable	1	2	3	4	5	6	7	8	9	10	More desirable
Unattractive	1	2	3	4	5	6	7	8	9	10	More attractive
An outsider	1	2	3	4	5	6	7	8	9	10	An insider

## **Appendix. 11.**

### **Experiences in Adolescence - Semi-structured interview.**

**Semi-structured Interview**  
(patient groups only)

*Orientation Questions*

1. Can you tell me a little about your recollections of your teen age years (prompt: secondary school - if applicable)

*Social comparison questions based on the Adolescent Social Comparison Scale and the Adolescent Shame-Proneness Scale (Lang 1994)*

*Areas to be covered will include:-*

1. During your teenage years / secondary school did you have a best friend?
2. Did you have a group of friends?
3. Did you ever get bullied / picked on in school?
4. At about what age did you reach puberty? Compared to your friends / people in your year do you think this was early, late or about the same?
5. Compared to your friends / people in your year how shy did you think you were?
6. Compared to your friends / people in your year how clever did you think you were?
7. Compared to your friends / people in your year how popular did you think you were?
8. Compared to your friends / people in your year how attractive did you think you were?
9. Compared to your friends / people in your year how strong did you think you were?
10. Compared to your friends / people in your year how big (physical size) did you think you were?
11. Compared to your friends / people in your year how athletic / good at sport did you think you were?
12. Compared to your friends / people in your year how different did you think you were?
13. Compared to your friends / people in your year how left out did you think you were?

Questions 4 - 13 answers will be coded in order to obtain ordinal data

- e.g.     1 = felt “inferior” to peers ( i.e., more shy, less clever, less popular etc..)  
           2 = felt approx. the same as peers  
           3 = felt “superior” to peers (i.e. less shy, more clever, more popular etc.)

## **Appendix. 12.**

### **Experiences in Adolescence - Questionnaire.**

## **Experiences in Mid- Adolescence Questionnaire.**

Below are some questions asking you about some of your experiences in mid-adolescence (approx. 14-15 years). Before you answer these questions it may be helpful to try and remember what you were doing at this stage of your life (e.g. where you still at school, what year where you in, can you think of any significant events that happened during that time etc.)

**Remember these questions are asking about your recollections of how you felt when you were approx. 14-15 years old.**

1. Compared to your peer group, do you think that you reached puberty;

Early \_\_\_\_\_  
Late \_\_\_\_\_  
About the same \_\_\_\_\_

2. Compared to your peer group, how shy do you think you were;

More shy \_\_\_\_\_  
Less shy \_\_\_\_\_  
About the same \_\_\_\_\_

3. Compared to your peer group, how clever did you think you were;

More clever \_\_\_\_\_  
Less clever \_\_\_\_\_  
About the same \_\_\_\_\_

4. Compared to your peer group, how popular do you think you were;

More popular \_\_\_\_\_  
Less popular \_\_\_\_\_  
About the same \_\_\_\_\_

5. Compared to your peer group, how attractive did you think you were;

More attractive \_\_\_\_\_  
Less attractive \_\_\_\_\_  
About the same \_\_\_\_\_

6. Compared to your peer group, how strong (physical strength) did you think you were;

Stronger \_\_\_\_\_  
Less strong \_\_\_\_\_  
About the same \_\_\_\_\_



7. Compared to your peer group, how big (physical size) did you think you were;

Bigger \_\_\_\_\_

Smaller \_\_\_\_\_

About the same \_\_\_\_\_

8. Compared to your peer group, how athletic (good at sport) did you think you were;

More athletic \_\_\_\_\_

Less athletic \_\_\_\_\_

About the same \_\_\_\_\_

9. Compared to your peer group, how similar (e.g. in terms of your values, beliefs, experiences, likes and dislikes etc..) did you feel;

Very different \_\_\_\_\_

Slightly different \_\_\_\_\_

The same \_\_\_\_\_

10. Compared to your peer group, how left out did you feel;

Very left out \_\_\_\_\_

Slightly left out \_\_\_\_\_

Accepted \_\_\_\_\_

**Appendix. 13.**

**Information Leaflets -**  
**Ward Staff and Registered Medical Officers (RMO' s).**

## **INFORMATION LEAFLET - NURSING STAFF**

### **WARD:**

We are conducting a research project looking at people's experiences in relationships and particularly their thoughts about romantic partners.

We are specifically investigating the role of attachment patterns and the process of social comparison in sexual jealousy leading to abusive acts against intimates.

In order to look at this we are hoping to be able to talk to a number of patients whilst they are in the hospital. Specifically, we are looking for a group of males who have offended against a romantic / sexual partner, and a group of men who have no reported offences against their romantic / sexual partner. It is our intention to also have a further, "non offending" comparison group, which we hope to recruit from the general population.

Patient participants in the study will be approached and the nature of the study will be explained to them. They will be informed that it is a study looking at "people's experiences in relationships in general and more specifically in romantic relationships", they will not be specifically told that it is concerning sexual jealousy leading to abusiveness, as we wish to avoid sensitising them to this aspect of relationships. They will be asked to complete some brief questionnaires related to attachment style, jealousy, the expression of anger and social comparison. There will also be a brief interview which will focus on social comparison in adolescence.

The details of this research will be explained to the R.M.O covering the ward, and their consent will be obtained for certain patients to be approached for their inclusion in the study. Written confirmation of this consent will be available.

Should any of the patients on this ward consent to participate in the study then the ward manager will be informed of this.

Thank you for your time. If you have any questions regarding this study, please do not hesitate to contact me at the psychology department.

**Jeanette Allen (Clinical Psychologist in training)**

**Supervised by; Dr. Todd Hogue (Consultant Forensic Psychologist) and  
Dr. Vincent Egan (Clinical Psychologist)**

## **INFORMATION LEAFLET**

Dear Dr.

We are conducting a research project looking at people's experiences in relationships and particularly their thoughts about romantic partners.

We are specifically investigating the role of attachment patterns and the process of social comparison in sexual jealousy leading to abusive acts against intimates.

In order to look at this we are hoping to be able to talk to a number of patients whilst they are in the hospital. Specifically we are looking for a group of males who have offended against a romantic / sexual partner, and a group of men who have no reported offences against their romantic / sexual partner as a comparison group. It is our intention to also have a further "non-offending" comparison group, which we hope to recruit from the general population.

Patient participants in the study will be approached and the nature of the study will be explained. They will be informed that it is a study looking at "people's experiences in relationships in general and more specifically in romantic relationships", they will not be explicitly told that it is concerning sexual jealousy leading to abusiveness, as we wish to avoid sensitising them to this aspect of relationships. They will be asked to complete some brief questionnaires related to attachment style, jealousy, the expression of anger and social comparison. There will also be a brief interview which will focus on social comparison in adolescence.

I would be happy to meet with you to discuss the details of this study and to answer any questions that you may have.

I will be asking for your written consent to approach any of your patients identified as meeting the inclusion criteria for the study. You will, of course, be informed if any of your patients agree to participate. In order for your patients to take part in this study, your written consent will be required.

Thank you for your time and help, I will be contacting you shortly with details of any of your patients that we would like to approach to participate in the study, but if, in the meantime, you have any questions please do not hesitate to contact me.

**Jeanette Allen (Clinical Psychologist in Training)**

**Supervised by; Dr. Todd Hogue (Consultant Forensic Psychologist) and**

**Dr. Vincent Egan (Clinical Psychologist)**

## **Appendix. 14.**

### **Patient Invitation to Participate and Information Leaflet.**

## **LETTER OF INVITATION TO PARTICIPATE.**

Dear (patient's name),

I would like to invite you to participate in a research project looking at people's experiences in close relationships. The project is described in more detail in the "Information Leaflet".

Please take some time to read this leaflet, and I will return in a few days to discuss whether you would be willing to spend about an hour and a half of your time to participate in the study. You will also have a chance to ask any questions that you may have.

If you decide that you would be willing to participate, you will be asked for written consent at that time.

Thank you very much for your time.

Yours Sincerely.

Jeanette Allen and Dr. Todd Hogue  
(Psychology Department)

## **PATIENTS INFORMATION LEAFLET.**

We are conducting a research project looking at peoples general experiences in relationships and particularly about relationships with romantic partners.

We are hoping to be able to talk to a number of patients in the hospital about their current feelings about themselves and recent partners, and also to talk specifically about experiences during teenage years.

Participation in the study will involve the completion of some brief questionnaires about your view of yourself in relation to others, and experiences with current or previous partners.

A researcher will be present to help you complete these questionnaires and answer any questions. There will also be an interview relating to your experiences in your teenage years. It is anticipated that the interview will take about half an hour.

Your RMO, Ward manager and Named Nurse will be informed of your participation in the study, but information that you give will be anonymous and will not be traced to you as an individual.

If you do not wish to participate in the study, or if you wish to withdraw from the study, you may do so without having to justify your decision and your future treatment will not be affected.

### **Please note;**

**\* All the information that you give whilst participating in this study will be treated in confidence and your anonymity assured.**

**\* Your choice to participate, (or not to participate) will in no way effect the treatment that you receive or may receive in the future.**

**\* You may decide to stop at any point during the questionnaires or interview.**

**Thank you for your time and attention.  
Jeanette Allen and Dr. Todd Hogue  
(Psychology Department)**

**Appendix. 15.**

**Questionnaire Pack Covering Letter -  
Non-Violent Comparison Group**



Dear Sir,

I am conducting a research project looking at the experiences of men in close relationships. Specifically, I am looking for the views of men aged 18+ who have had at least one stable heterosexual relationship.

If you meet the above criteria, I would be very grateful if you would consider spending some time completing the attached questionnaires. The questionnaires are designed to look at people's general experiences in relationships and there are also some questions relating to your thoughts and experiences about romantic relationships.

Please follow any instructions at the top of each questionnaire and do not miss any questions out. Remember that there are no right or wrong answers. Once you have completed the questionnaires please place them in the envelope provided to be returned to me anonymously. Thank you!

The information obtained in these questionnaires will be treated in confidence and your anonymity is assured.

*Thank you for your time and help!*

*Jeanette Allen  
Clinical Psychologist in Training*

*(If you have any questions regarding completion of the questionnaires or wish to have more information about the study, please do not hesitate to contact me at the Psychology Department on 01777 248321.)*

**Appendix. 16.**

**Demographic Information Sheet -  
Non-Violent Comparison Group.**

## **Demographic Information**

Please could you complete the following demographic information:

### **Personal Details.**

**Age:** \_\_\_\_\_

**Gender:** Male / Female

**Ethnic Origin:**  
(Please tick)

1. White (British)
2. White European
3. White other
4. Black Carib. / West Indian
5. Black African
6. Black other
7. Indian
8. Pakistani
9. Bangladeshi
10. Asian other
11. Other

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **Education / Occupation**

**Age at leaving school:**  
(Please tick)

- 0-4years  
5-9yrs  
10-16yrs  
17+

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Educational achievements:**  
(Please tick)

- No formal qualifications  
CSE / GCSE / O'levels  
A'levels, no further education  
Further qualification e.g. diploma, certificates  
Degree level qualifications.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Occupation:** \_\_\_\_\_

**Relationship.**

**Relationship Status:**  
(Please tick)

Married, living with spouse \_\_\_\_\_  
Married, separated from spouse \_\_\_\_\_  
Divorced \_\_\_\_\_  
Widowed \_\_\_\_\_  
Living with partner \_\_\_\_\_  
Single\* (*see below*) \_\_\_\_\_  
Romantic partner (more than 6 months) \_\_\_\_\_

*\* If "single" - Have you previously had one or more romantic relationships lasting more than six months?*

*Yes* \_\_\_\_\_  
*No* \_\_\_\_\_

**Living arrangements:**  
(Please tick)

Alone \_\_\_\_\_  
Alone, plus children \_\_\_\_\_  
With wife / partner \_\_\_\_\_  
With wife / partner and children \_\_\_\_\_  
With other relatives \_\_\_\_\_  
With friend(s) \_\_\_\_\_  
No fixed abode \_\_\_\_\_

**Children:**

**How many children have you got?** \_\_\_\_\_

(Please tick)

From current relationship only \_\_\_\_\_  
From previous relationship \_\_\_\_\_  
Both previous and current relationship \_\_\_\_\_  
No children \_\_\_\_\_

***Thank-you!***

## **Appendix. 17.**

**Experiences in Adolescence: Tables to Show the Percentage  
Distribution of Self-reported Status in Adolescence Between the  
Groups.**

### Experiences in Adolescence: Self-report Status.

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Puberty	Inferior (late)	50%	18.75%	27.6%
	Same	31.25%	56.25%	62%
	Superior (early)	18.75%	25%	10.4%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Shy	Inferior (more shy)	50%	43.75%	48.3%
	Same	31.25%	25%	37.9%
	Superior (less shy)	18.75%	31.25%	13.8%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Clever	Inferior (less clever)	43.75%	50%	13.8%
	Same	50%	37.5%	48.3%
	Superior (more clever)	6.25%	12.5%	37.9%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Popularity	Inferior (less popular)	37.5%	43.75%	3.44%
	Same	37.5%	37.5%	86.2%
	Superior (more popular)	25%	18.75%	10.36%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Attractive	Inferior (less attractive)	50%	18.75%	37.9%
	Same	37.5%	62.5%	55.2%
	Superior (more attractive)	12.5%	18.75%	6.9%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Physical Strength	Inferior (weaker)	43.75%	6.25%	24.13%
	Same	37.5%	62.5%	44.8%
	Superior (stronger)	18.75%	31.25%	31.07%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Physical size	Inferior (smaller)	50%	31.25%	20.7%
	Same	43.75%	37.5%	44.8%
	Superior (bigger)	6.25%	31.25%	34.5%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Athletic	Inferior (less athletic)	31.25%	25%	44.8%
	Same	31.25%	25%	10.3%
	Superior (more athletic)	37.5%	50%	44.9%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Different	Inferior (very different)	68.75%	37.5%	10.3%
	Slightly different	25%	43.75%	20.7%
	Superior (the same)	6.25%	18.75%	69%

		Group		
		Domestically Violent	Extra-domestically Violent	Non-Violent
Accepted	Inferior (very left out)	43.75%	25%	3.44%
	Slightly left out	43.75%	62.5%	31%
	Superior (accepted)	12.5%	12.5%	65.56%