

**Volume One**

**To what degree does social rank theory help us to understand self-injurious behaviour amongst patients in a high security setting?**

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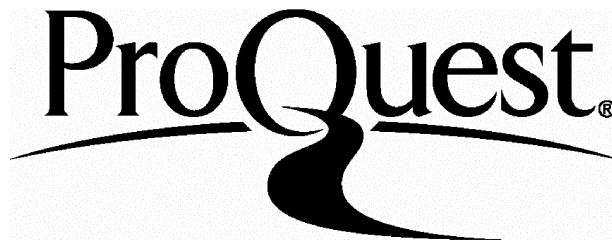
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## Abstract

The aim of this study was to investigate the relationship between perceived social rank and self-injurious behaviour amongst patients in a high security hospital. The study also examined differences between individuals who engaged in a least one instance of self-injurious behaviour during a 5-year period (N=21) and those who had never self-injured (N=15). Participants were asked to complete self-report questionnaires designed to measure feelings relating to social put-down, general levels of shame and depression, level and quality of self-capacities (e.g. relatedness, identity and affect regulation), and autobiographical memory. It was found that males who self-injured were significantly more likely to have a history of substance abuse than those who did not self-injure. Males participants who self-harmed reported experiencing greater difficulties in the areas of self capacities; were more sensitive to social put-downs and produced significantly more memories which were over-general, than those who had never engaged in self-injury. The female participants (N=13) who displayed greatest over-general recall had the fewest episodes of self-injury in the last 5 years. This suggests that for some individuals at least, over-general memory may have an adaptive function in helping to protect individuals from the build-up of the kinds of thoughts, memories, and feelings which may lead to self-harm. Finally, while there was no significant difference between males who self-injured and those who did not in relation to their 'general' perception of social rank, as predicted, both men and women reported experiencing a dramatic fall in their perceived social rank just prior to self-injurious behaviour. Immediately following the act of self-injury, the female's perception of social rank returned to within the 'normal' range relative to their own base-rate. While men also reported

that their perception of social rank increased following the act of self-injury, it appears to take longer before there is a return to `normal' levels relative to their own base-rate.

The study highlighted several variables of clinical interest within this client group which seem to discriminate self-harmers from those who do not. The findings provide preliminary evidence for the development of interventions directed at addressing self-injuring individual's perceived social status, difficulties in the area of self-capacities (relatedness, identity and emotion regulation), and autobiographical recall.

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## **Introduction**

### 1.1 Introduction to the thesis

This thesis is concerned with the self-injurious behaviour of individuals within a high security hospital. This is an important area because such behaviours are associated with considerable distress amongst patients who wish to refrain from engaging in self-harm and feel that it is beyond their control and also for staff involved in the management of their care. While the literature relating to self-harming behaviours is extensive, as yet, few psychological treatments based upon our current theoretical understanding have proved beneficial in substantially reducing such behaviours.

This first chapter will present a brief review of the literature relating to self-injurious behaviour. It will provide definitions of self-harming behaviours and their prevalence within the general and clinical population. In addition, issues relating to diagnosis, gender and an understanding of the impact of secure settings will be investigated. Secondly, current theories of the origins and functions of self-injurious behaviour will be discussed. In particular, there will be a focus upon 'self-capacities' (self-awareness, ability to regulate affect and maintain meaningful relationships), memory processes, and the role of social comparison and shame in self-injury.

The method chapter will describe the procedure followed for the recruitment and interviewing of participants. The measurement instruments used including their reliability and validity by drawing upon previous studies in which they have been employed, will then be detailed.

In the results chapter, the quantitative data collected will be presented and statistical tests will be described showing where significant findings have been made.

Finally, the discussion chapter will describe the theoretical and clinical implications of the findings of this study. In addition, consideration will be given to its limitations and recommendations will be made for further investigation.

## **1.2 Deliberate self-harm**

Self-harm is amongst one of the most severe problems facing those responsible for management and medical care of individuals within secure settings. A previous incident of deliberate self-harm e.g. either self-injury or a suicide attempt is the single most significant risk factor for future suicide (Fernando & Storm, 1984; Macleod, Williams, & Linehan, 1992; Morgan, 1979; Roy, 1982). In fact, 1% of those who harm themselves commit suicide in the following year and up to 10% commit suicide eventually (Gunnell & Frankel, 1994). Therefore, developing effective treatment interventions for self-injury is crucial if the likelihood of completed suicides is to be reduced. Yet:

'of all disturbing patient behaviours, self-mutilation is the most difficult for clinicians to understand and to treat...The typical clinician treating a patient who self mutilates is often left feeling a combination of helpless, horrified, guilty, furious, betrayed, disgusted and sad' (Frances, 1987, p. 316).

### 1.2.1 Definitions of self-harming behaviours

While acts of self-injury are seen as part of the 'deliberate self-harm' category which includes parasuicide<sup>1</sup> and suicide, it is now generally accepted that there is an important difference between attempted suicide and self-injury (Briere, 1996; Favazza & Rosenthal, 1993; Tantum & Whittaker, 1992). In some ways the distinction is clear; in attempted suicide the person attempts to kill themselves, in self-injury the person has no such intent. Walsh & Rosen (1988) in discussing the difference between parasuicide and self-injury have noted:

'In the case of ingesting pills or poison, the harm caused is uncertain, ambiguous, unpredictable, and basically invisible. In the case of self-lacerations, the degree of self-harm is clear, unambiguous, predictable as to course, and highly visible.' (p. 32).

Finally, a further distinction has been made between direct self-injurious behaviour and indirect self-injurious behaviour (e.g. eating disorders, substance abuse and sexual-risking) where the link between the behaviour and the consequence is remote and equivocal (Ross & McKay, 1979). However, adherence to simplistic definitions is problematic as incidents that appear to be suicide attempts e.g. overdosing, may not involve an intent to die. Alternatively, the individual may have ambivalent or confused views of their exact intent. In addition, a person may engage in both behaviours at different times, and others may appear ignorant about the dangerousness of the method they choose (Beck, Beck, & Kovaks, 1975). Thus, it

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<sup>1</sup> Kreitman (1977) defined parasuicide as (1) nonfatal, intentional self-injurious behaviour resulting in actual tissue damage, illness, or risk of death; or (2) any ingestion of drugs or other substances not prescribed or in excess of prescription with clear intent to cause bodily harm or death. Parasuicide

may be difficult to distinguish between self-injury and repeated, minor self-harming or parasuicidal behaviour on the basis of lethality and intent (Kreitman, 1977).

Many practitioners classify all these behaviours as self-destructive (Linehan, 1993) and therefore similar. However, as mentioned previously, the two behaviours are thought to be conceptually different (Walsh & Rosen, 1988). The person who self-injures is seeking a means to survive (Babiker & Arnold, 1997), whereas individuals who attempt suicide show greater levels of helplessness and hopelessness about the future and therefore wish to 'destroy' themselves (MacLeod et al., 1992). Based on this notion, this study makes a distinction between self-injury and parasuicidal behaviour and is concerned primarily with the former.

Self-injury has been defined as an act that involves deliberately inflicting pain and/or injury to one's own body, but without suicidal intent. Types of self-injury include cutting e.g. arms, hands, legs, face, breasts and genitals, burning or scolding, inflicting blows to the body, head-banging, or punching walls and window panes. Other methods include scratching, picking, reopening old wounds, scraping, inserting objects under the skin or into body orifices and swallowing sharp objects or harmful substances.

### 1.2.2 Prevalence of self-injury

Estimates of the incidence of self-injury within the general population vary widely. This may reflect in part the secrecy and lack of understanding surrounding the

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includes both actual suicide attempts and self-injuries (including self-mutilation and self-inflicted burns).

behaviour together with an absence of a clear definition. Many studies investigate parasuicidal behaviours; others are restricted to self-injurious behaviour. In addition, self-injury may be confounded with psychiatric diagnoses such as Borderline Personality Disorder (BPD), and in the normal population with suicidal behaviour and overdosing (Babiker & Arnold, 1997). Nevertheless, towards the end of the 1980's in the United Kingdom the number of people deliberately harming themselves was estimated to be between 2 and 3.5 per 1,000 per year, representing a fourfold increase since the early 1960s (Williams & Broadbent, 1986). In a more recent review, reported estimates of its prevalence, ranged from 400 to 1400 per 100,000 population per year (Favazza & Rosenthal, 1993). Estimates based on a variety of British studies suggest that at least 1 in 600 people injure themselves sufficiently to need hospital treatment (Tantum & Whittaker, 1992). While, approximately 75% of instances of self-injurious behaviour involves persons between the ages of 18 and 45 years (Paerregaard, 1975), people often report that their self-injury began in childhood to early teens (Favazza, 1987), with scratches and bumps being disguised as 'accidents', progressing to more systematic cutting, burning etc. in adolescence. In a study carried out on a non-clinical university population, Briere, Henschel, Smiljanich and Morgan-Magallanes (1990) found that as many as 11% of students had slashed or cut themselves at some point in their lives. However, Walsh & Rosen (1988) concluded that determining the incidence of self-injury is 'difficult if not impossible at present', due to severe under-reporting and the great variation in the nature of studies reviewed.

### 1.2.3 Diagnostic issues in self-injury

Literature relating to self-injury takes what might be called a clinical approach, pathologizing self-mutilation, viewing it as representative of a maladjustment, a disorganization of normal functioning, or as an illness (Babiker & Arnold, 1997). Specific psychiatric diagnoses stem from a structuralist approach; that is, one where the main emphasis is on classification, or assigning 'problem' behaviours to a category. Self-injurious behaviour is associated with a range of diagnostic categories including personality disorders (particularly Borderline and Antisocial) (Lacey & Evans, 1986; Winchel & Stanley, 1991), major depression (Dulit, Fyer, Leon, Brodsky & Frances, 1994), obsessive-compulsive disorder (Stinnett & Hollender, 1970), alcoholism and other substance abuse (Favazza & Conterio, 1989; Simpson, 1976; Waldenburg, 1972), dissociative disorders (van der Kolk, Berry & Herman, 1991), eating disorders (Favazza, DeRosear, & Conterio, 1989; Lacey & Evans, 1986; Simpson, 1976), psychotic disorders (Clark, 1981), anxiety disorders such as posttraumatic stress (van der Kolk & Fisher, 1993; Zlotnick, Mattia, & Zimmerman, 1999) and with learning disability (Emerson, 1990). Self-injury is also associated with a history of offending (Waldenburg, 1972; Lacey & Evans, 1986), particularly violent offending (Bach-y-Rita, 1974).

Self-injurious behaviour is associated with "Cluster B" personality disorders (Borderline, Antisocial, Histrionic and Narcissistic personality disorders), most commonly with Borderline Personality Disorder (BPD) (Konicki & Schulz, 1989). In fact, recurrent suicidal behaviour, gestures, threats, or self-mutilating behaviour is described specifically as one of the criteria for diagnosis in the DSM-IV (American

Psychiatric Association, 1994). Between 70 – 75% of BPD patients have a history of at least one self-injurious act (Clarkin, Widiger, Frances, Hurt, & Gilmore, 1983). These acts can vary in intensity, from requiring no medical treatment (e.g. slight scratches, head-banging, and cigarette burns) to intervention on an intensive care unit (e.g. overdoses, self-stabbings, and asphyxiations).

The difficulty in accurately diagnosing a patient whose primary presenting symptom is self-injury has frequently been noted. This may be further complicated by the possibility that because of the strong traditional association between BPD and self-injury (as evidence of a 'multi-impulsive personality disorder', Lacey & Evans, 1986), there may be a bias towards assigning such a diagnosis (Ghaziuddin, Tsai, Naylor, & Ghaziuddin, 1992). Self-injury has also been viewed as an axis I disorder of 'impulse control' (Pattison & Kahn, 1983). Other authors note that there is no personality disorder unique to self-injurious behaviour and argue for the recognition of a distinct 'deliberate self-harm syndrome' (Ross & McKay, 1979; Tantum & Whittaker, 1992). In this context, psychological symptoms include: (1) sudden and recurrent intrusive impulses to harm oneself without the perceived ability to resist; (2) a sense of existing in an intolerable situation which one can neither cope with nor control; (3) increasing anxiety, agitation, and anger; (4) constriction of cognitive-perceptual process resulting in a narrowed perspective on one's situation and personal alternatives for action; (5) a sense of psychic relief after the act of self-harm; and (6) a depressive mood, although suicidal ideation is not typically present (Pao, 1969).



#### 1.2.4 Gender issues and self-injury

There is some controversy over the gender incidence of self-injurious behaviour. Many authors have noted that self-injury is more common amongst women than men. Most individuals who engage in nonfatal self-injurious behaviour (Bogard, 1970) and most individuals who also meet the criteria for BPD are women. Widiger and Frances (1989) reviewed 38 studies reporting the gender of patients meeting the criteria for BPD and found that women comprised of 74% of the population. While this may be true for those individuals in contact with psychiatric units, Robinson and Duffy (1989) and Briere and Gil (1998) suggest that in terms of overall epidemiology, the distribution is a much more equal. Interestingly, self-injury in men is most often associated with Antisocial Personality Disorder (APD) (Winchel & Stanley, 1991). However, Borderline and Antisocial personalities often overlap. Both syndromes have in common impulsivity, failures to sustain socially productive roles, an intolerance of frustration, a high frequency of concurrent depressions, and manipulateness (Gunderson, 1984). It is proposed that individuals with APD are stimulus-seeking; those who are unable to obtain stimulation from social interactions may resort to self-injury instead and when men do self-injure it seems that the wounds that they cause are often more serious (Pao, 1969).

It is suggested that there are gender-specific issues which contribute to the causes of self-injury. Some theorists have focused on the possible significance of anatomical differences between men and women (Cross, 1993), while others concentrate on the effects of gender socialization on boys and girls (Burstow, 1992). More specifically, it has been hypothesised that femininity imposes a whole series of demands and

constraints on women's behaviour, many of which are contradictory. To consistently suppress needs and feelings and to tolerate unfair, unfulfilling or abusive situations is deeply damaging to self-esteem and emotional health. In the absence of safe, culturally sanctioned outlets for resulting feelings of resentment, grief and anger, women's feelings are likely to be turned inwards and acted out upon themselves. In contrast to women, men are encouraged to achieve mastery and ownership of their bodies and their sexuality. However, theorists suggest that men are subject to expectations of 'masculinity', to display fearlessness, assertiveness and to some extent, aggression. Failure to be successful in public spheres, such as sport, manual skills, career, income etc. may lead to feelings of loss of role, social status or power, making individuals vulnerable to depression, emotional difficulties and possibly self-injury (Babiker & Arnold, 1997). While men more frequently deal with uncomfortable feelings by using drink, drugs, work and hobbies as a means of escape, within secure settings the degree of powerlessness, lack of control, abuse and violence from others, results in higher rates of self-injury than in the general population (Toch, 1975).

#### 1.2.5 Self-injurious behaviour in secure settings

The incidence of self-injury in the psychiatric population is much higher than in the general population, ranging from 4.3% to 20% of all psychiatric inpatients (Darche, 1990; Langbein & Pfohl, 1993). In particular, high security hospitals, secure units and prisons are the settings in which some of the highest incidences of self-injury are found, amongst both men and women (Winchel & Stanley, 1991). Harrington (1994) found that there was an average of 5.5 self-harming incidents amongst female

patients each week in a secure psychiatric setting. A review of female patient's treatment plans carried out as part of a needs assessment in 1997 at one of the English Special Hospitals revealed that 52% of individual treatment plans identified deliberate self-harm as a major problem particularly associated with personality disorder diagnoses. Similarly, in a study of patients held under Section 3, it was found that 88% of the sample of women self-harmed, compared to 15% of the male sample (Sellars & Liebling, 1988). Regardless of gender, self-harming behaviours represent a significant problem on wards for individuals in secure settings. The most common response is Level 3 Observations and Accident and Emergency referrals post-injury, both of which have huge financial implications notwithstanding the focus on management post-injury rather than prevention of deliberate self-harm. In addition, staff morale is often low due to lack of training in effective strategies for dealing with self-harming behaviours.

A number of studies have identified factors to account for the high incidence of self-injurious behaviour in secure settings. Firstly, 19% of psychiatric inpatients are estimated to meet the criteria for Borderline Personality Disorder; and of patients with some form of personality disorder 63% also appear to meet Borderline Personality Disorder criteria (see Widiger & Frances, 1989, for a review). Research also supports an association between self-injury and antisocial behaviour (Simeon, Stanley, Frances, Mann, Winchel, & Stanley, 1992). Secondly, self-report data suggests that there are a number of psychosocial 'trigger' factors including environmental restriction, feelings of powerlessness, separation from family and friends, boredom, experiences of being bullied, recent life events e.g. losses, and lack of social and sensory stimulation, particularly when placed in isolation (Cookson,

1977, Felthous, 1997). Paradoxically, close observation and control may lead to further frustration and isolation (Burrow, 1992, Cullen, 1985). Where patients have no release date they often feel depressed and demoralized, with little motivation to deal positively with their feelings, so that self-injury may be perpetuated (Babiker & Arnold, 1997). Such factors may be highly reminiscent of abuse suffered as a child (experiences common to those within secure settings), evoking feelings of terror and victimization (Potier, 1993). Many women within high security who had committed arson, reported that the feelings they experienced prior to their offences were similar to those experienced prior to episodes of self-injurious behaviour. Both behaviours have been theoretically linked as attempts to escape abusive situations and to access therapeutic care (Liebling, Chipchase, & Velangi, 1997).

### **1.3 Current theories of self-injurious behaviour**

The aetiology of repeated self-injurious behaviour is clearly multi-factorial, if only because it occurs in such a variety of conditions, from personality disorders and psychosis to mental handicap. A wide variety of psychological models have been formulated to account for self-injury. While they may be derived from differing theoretical perspectives such hypotheses are not mutually exclusive and self-injury may serve multiple purposes for the individual. Based upon Suyetmoto's (1998) categorization of functional models from the literature, some of the most influential theories will be outlined briefly.

A number of authors suggest that self-injury has an important function in the regulation of emotion. Affect regulation models are rooted largely in ego

psychology. In this context, self-injury is seen as a way to express emotion and conflict both to the self and others and a way of achieving a sense of control over overwhelming emotions (Darche, 1990; Raine, 1982; Woods, 1988). More specifically, one theory suggests that increased emotion may be related to perceived abandonment and that self-injury may turn psychological pain into physical pain which can be more easily controlled (Darche, 1990; Raine, 1982). Alternatively, it is postulated that anger towards the abandoning object may be projected inwards leading to a desire to punish the self (Freud, 1958). Regardless of the hypothesised origins of increased affect, research studies have indicated that raised levels of anxiety have consistently been associated with self-injurious behaviour (Bach-y-Rita, 1974; Shea, 1993; Wilkins & Coid, 1991;). Self-injurers frequently report that self-injurious episodes are often preceded by feelings of anxiety (Bennun, 1984; Winchel & Stanley, 1991) which decrease following the act of injury (Winchel & Stanley, 1991). In fact, at least half of the participants interviewed in a study carried out by Liebenluft and colleagues (1987) reported that self-injury had an analgesic function. They propose that this may lead the behaviour to become strengthened and/or resistant to change.

The environmental model, rooted in behavioural and systemic theory, focuses on the interaction between the self-injurer and their environment. This theory suggests that familial modelling of abuse may lead the self-injurer to consider the behaviour as acceptable. In addition, through observation, individuals may learn that self-injury is rewarded. After imitating the behaviour, self-injury is then reinforced by the attention and concern of family, peers and/or caregivers (Bennun, 1984; Podovoll, 1969). In addition, Offer and Barglow (1960) found that individuals who self-

injured reported experiencing increased social status amongst peers through engaging in the behaviour.

Drive models are based upon psychoanalytic developmental theory. They propose that self-injury is an expression or repression of life, death, and sexual drives. The anti-suicide model suggests that self-injury protects against the complete enactment of the death drive, whilst simultaneously expressing it (Menninger, 1938). This model focuses on the behaviour as an active coping strategy used to avoid complete destruction of the self through the act of suicide. Sexual models suggest that self-injury acts as a way of gaining sexual gratification whilst also punishing the self for the sexual drive (Woods, 1988). It has been postulated that self-injury also serves to avoid sexual feelings or actions and/or attempts to control sexual maturation (Offer & Barglow, 1960; Simpson, 1975). Thus, it is proposed that self-injury both punishes and protects against the sexual drive, whilst partially enacting it through projection into the act of mutilation. However, there is little empirical evidence to support these models.

The boundaries model of self-injury is rooted in object relations theory. This model suggests that individuals who self-injure were unable to adequately separate or individuate from their primary caregiver due to a lack of secure attachment in the first place (Pao, 1969; Walsh & Rosen, 1988). This may interfere with the child's ability to achieve stable object relations and may lead to blurred boundaries between the self and others. It is hypothesised that self-injury may serve to define the boundaries and that wounds and scars may help to create a sense of identity (Raine, 1982).

Finally, the dissociation model is derived from self-psychology as it is concerned with the maintenance of the self in the face of overwhelming emotion. It is suggested that children and adults may cope with traumatic experiences by numbing themselves both physically and emotionally, or by distancing themselves from present awareness of themselves and their environment (Babiker & Arnold, 1997). This type of dissociation may continue to occur even in the absence of external threat and the function of self-injury in alleviating dissociation has frequently been noted (Pao, 1969; Raine, 1982; Simpson, 1975). Although the exact mechanism is not known, it has been suggested that shock from seeing blood may be a possible agent (Simpson, 1975) in helping individuals to regain feelings of being alive, real and present.

Shearer (1994) developed a 17-item self-report questionnaire to investigate the functions of self-injury in individuals with a diagnosis of borderline personality disorder. He found that all items were endorsed by at least one of the 41 participants suggesting that self-injury is a complex phenomenon which appears to defy easy generalisation. In addition, it is possible that the functions of self-injury may change over time. With this in mind, psychological functions that appear to be important variables in self-injurious behaviour will be described in more detail below. First, I will consider 'self-capacities' which includes self-awareness, an ability to regulate affect and maintain meaningful relationships. Secondly, I will discuss memory processes found to be associated with self-harming behaviours. Finally, I will examine the role of social comparison and shame in self-injury.

### **1.3.1 Self-capacities and self-injurious behaviour**

Although the most obvious components of psychological disorder are usually understood in terms of unwanted negative mood states, cognitive distortions, psychosis and post-traumatic stress, a number of researchers have identified specific self-related problems in individuals whose early psychological development was disrupted by childhood abuse and/or neglect (Elliot, 1994). Briere (1997a) notes that an individual's level and quality of "self-capacities" are associated with psychological disorders (Garber, Braafladt, & Weiss, 1995) and also contribute to the development of more pervasive, "personality" levels of distress and dysfunction. According to the theories of Kohut (1977), McCann and Pearlman (1990) and Briere (1997), successful adult functioning is dependant upon the extent to which an individual is able to accomplish the following tasks: maintaining a sense of personal identity and self awareness; controlling and tolerating strong, negative affect and forming and maintaining meaningful relationships.

A stable sense of personal identity is an important aspect of psychological functioning in Kohut's and Briere's model (Kohut, 1977; Briere, 1997). Individuals without a coherent sense of self often lack the internal self-monitoring that would otherwise inform them about their feelings, thoughts, needs, goals and behaviour (Elliot, 1994). It is not unusual for individuals to report that they have no sense of self at all or that they feel 'empty'. Consequently, they may depend on others for guidance in these domains. Unfortunately, other-directedness is often maladaptive and may lead to difficulties in self-assertion and a tendency to confuse internal feelings, thoughts or perspectives with those of other people.



In terms of emotion regulation, the ability to control (or modulate) negative affect is proposed to develop in the early years of life (Bowlby, 1973). Briere's model (Briere, 1977) suggests that children who have been abused or neglected such that their needs for love and nurturance are not met, or who have experienced the loss of a primary caregiver, are likely to suffer greatly from overwhelming feelings of abandonment, rage, frustration and loss. In addition, Briere hypothesises that they often develop the sense that the world is not a safe place. If such children were not supported in expressing and containing these feelings, they would not have learnt how to manage such distress in later life. Thus, individuals with problems in emotion regulation often experience affective instability or mood swings, problems in inhibiting the expression of strong affect, and frequent difficulties with terminating dysphoric states, especially without externalisation or avoidance. In particular, the absence of sufficient internal affect regulation skills may lead such individuals to respond with behaviours such as substance abuse (Grilo, Martino, Walker, Becker, Edell, & McGlashan, 1997), inappropriate or excessive sexual behaviour (Brennan & Shaver, 1995), impulsivity (Herpertz, Gretzer, Steinmeyer, Muehlbauer, 1997) and self-injury (Briere & Gil, 1998) in order to distract, soothe, numb, or otherwise reduce painful internal states. In this context, behaviours such as cutting and burning the body seem to have important affect-regulating properties. Although the exact mechanism by which this occurs is unclear, it is common for individuals with BPD to report substantial relief from intense negative affective states such as anger, anxiety, sadness, grief, shame, and powerlessness, following such acts (Liebenluft, Gardener, & Cowdry, 1987).

Finally, it is hypothesised that the capacity to form and maintain interpersonal relationships is an important aspect of normal adult functioning. This ability is thought to be compromised in individuals who were maltreated or who lived in chaotic environments as children (Briere, 1996; Elliot, 1994; Herman, Perry, & van der Kolb, 1989), particularly if these experiences led to an ambivalent or insecure attachment style (Bowlby, 1988). Briere's model (Briere, 1997) suggests that one strategy frequently adopted by individuals who are ambivalent and distressed in relationships may be "idealization-devaluation". Thus, others are viewed from an unrealistically positive perspective that is unlikely to be sustained over time, leading to feelings of disappointment and devaluation (Hamilton, 1988). Alternatively, individuals may experience intense fears of abandonment, leading to negative affect and intense and frantic efforts to keep significant others from leaving them when faced with either real or perceived loss (Batgos & Leadbeater, 1994). Consequently, such individuals may have problems in forming intimate attachments, repeatedly develop conflictual or chaotic relationships and/or engage in behaviours that are likely to threaten or disrupt close relationships with others (Simpson, 1990). It has been postulated that individuals may be more likely to play out conflicts and feelings in isolation rather than in relationship to others, sometimes in ways involving injury to their own bodies.

Numerous studies indicate that problems with adult attachment, self-awareness, relationships to others, and affect regulation are correlated with reports of having been maltreated as a child (Herman, et al., 1989). Experiences may include childhood physical abuse (Dutton, 1998), emotional abuse or neglect and/or deprivation (Sroufe, Carlson, Levy, & Egeland, 1999), and in particular, sexual abuse

(Alexander, 1992). Childhood sexual abuse was reported by 86% of inpatients with BPD, compared to 34% of other psychiatric inpatients, in a study by Bryer and colleagues (1987). Similarly, Ogata, Silk, Goodrich, Lohr, and Westen (1989) found that 71% of patients with BPD reported a history of sexual abuse, compared to 22% of control patients with major depression. Finally, Bryer, Nelson, Miller, and Krol (1987) found that individuals with suicidal ideation or self-harming behaviours were three times more likely to have been abused as children than were patients without such behaviours. Women with a history of sexual abuse also engage in more medically serious self-harming behaviour (Wagner, Linehan, & Wasson, 1989). Although it is generally viewed as a social stressor, child abuse may play a less obvious role as a cause of physiological vulnerability to emotion dysregulation. Abuse may not only be pathogenic for individuals with vulnerable temperaments; it may create emotional vulnerability via effecting changes in the central nervous system. Shearer, Peters, Quaytman, and Ogden (1990) suggest that perceptual trauma may physiologically alter the limbic system. Severe, chronic stress may have permanent adverse effects on arousal, emotional sensitivity, and other factors of temperament (Linehan, 1993). Finally, van der Kolb and colleagues (1991) found that the younger the child when first abused or separated from caregivers, the more cutting behaviour, and the more severe the injuries inflicted. Furthermore, self-injurious behaviour was most tenacious amongst those who had the most severe histories of separation and neglect, leading them to suggest that 'although childhood trauma contributes heavily to the initiation of self-destructive behaviour, lack of secure attachments maintains it' (p. 1669). Thus, it has been suggested that patients who repeatedly engage in chronic self-cutting are prone to view current stresses as a return of childhood trauma, neglect and abandonment. In particular, experiences

related to interpersonal safety, anger, and emotional needs may precipitate dissociative episodes and consequently, self-destructive behaviour (van der Kolb, Perry & Herman, 1991).

The relationship between insecure attachment styles and personality disorder symptoms has been described in both the clinical literature (Fonagy, 1999) and empirical research (Brennan & Shaver, 1998). Individuals who experience difficulties in self-capacities frequently meet the diagnostic criteria for “Cluster B” personality disorders (Diagnostic and Statistical Manual of Mental Disorders, DSM-IV). As mentioned in section 1.2.3. (p. 10), the relationship between personality disorder, particularly BPD, and self-harming behaviours is well known (Bongar, 1991; Linehan, 1993). In fact, Grotstein (1987) considered BPD as a pervasive disorder of both regulation and experience of the self. Not surprisingly, substance abuse, which provides an anaesthetising or state-altering function, also appears to be common among individuals with altered self-capacities, including those with BPD or borderline traits (Trull, Sher, Minks-Brown, Durbin, & Burr, 2000).

### **1.3.2 Autobiographical memory and interpersonal problem solving**

A number of studies have investigated memory functions and problem solving in individuals who self injure and this research is reviewed here.

Williams (1997) emphasises the importance of memory in considering factors associated with depression and parasuicide. He stated that:

`memory provides us with all our knowledge about who we are, what we have been through in the past: happy times and sad times. It is on the basis of our memory that we make predictions about the future. If our memory is biased or faulty, then our predictions are also likely to be biased and faulty' (p. 158).

Similarly, Beck's cognitive theory of depression (Beck, Rush, Shaw, & Emery, 1979) and Abramson, Seligman and Teasdale's (1987) reformulation of helplessness theory suggest that over-generalisation is an important feature in the maintenance of emotional disturbance. Thus, it is thought that instead of recording specific events, a person tends to nest together events of the same type or category without distinguishing between them. The tendency to retrieve general rather than specific memories, which may impede the process by which change is brought about, has frequently been noted in depressed patients undergoing cognitive therapy (Williams, 1984).

#### 1.3.2.1 Over-general memory and emotional disturbance

In order to obtain an accurate measure of generality of autobiographical memory, the Autobiographical Memory Test (AMT, Williams & Broadbent, 1986), based on a word association test pioneered by C.G. Jung, was devised. During this test the patient is prompted to retrieve a specific memory to a sequence of emotional cue words. The first response is deemed to be over-general if it describes a situation in which either no time period is referred to, or it spans longer than one day. For example, in response to the cue word "enjoy" the memory "I always enjoy a good

party” would be scored as general, whereas “I enjoyed the party I had on my last birthday” would be scored as specific.

The phenomenon of over-general autobiographical memory was first described in a study that addressed the issue of why overdose patients display relatively long latencies to retrieve personal memories, especially in response to positive cue words. Williams & Broadbent (1986) found that participants who had attempted suicide who completed the AMT, showed biased retrieval when their performance was compared to hospital control groups. This bias was due to delayed retrieval of positive memories rather than speeded retrieval of negative memories. It was hypothesised that this effect was due to inappropriate retrieval strategies that resulted in general rather than specific memories in the overdose group.

However, over-generality of autobiographical memory is not confined to parasuicidal patients. It has also been identified in parents with relationship difficulties with their children (Wahler & Afton, 1980), sex abuse survivors (Kuyken & Brewin, 1995), Vietnam veterans with post-traumatic stress disorder (McNally, Litz, Prassas, Shin, & Weathers, 1994), and brain damaged patients (Baddely & Wilson, 1986; Cimino, Verfaellie, Bowers, & Heilman, 1991). Similar studies have also indicated that people with a primary diagnosis of depression, even if not suicidal, are much more likely to respond with over-general memories, especially in response to positive cue words (Kuyken & Dalgliesh, 1995; Williams & Scott, 1988; Moore, Watts, & Williams, 1988; Puffet, Jehin-Marchot, Timsit-Berthier, & Timsit, 1991; Brittlebank, Scott, Williams, & Farrier, 1993; Goddard, Dritschel, & Burton, 1996) and that over-general memories were not due simply to recent negative events or the effect of

drugs taken (Williams & Dritschel, 1988). Over-general memories were also present in anxiety disordered patients (Burke & Mathews, 1992) and patients with obsessive-compulsive disorder (Wilhelm, McNally, Baer, & Florin, 1997) who had co-morbid depression. Understandably, examination of the studies cited raises the question of whether autobiographical memory is simply an epiphenomenon of a transient depressive state. However, the correlation between specificity of autobiographical memory and depressed mood (as measured by the Beck Depression Inventory) has not been found to be significant in all studies (e.g. Kuyken & Brewin, 1995; Sidley, Whitaker, Calam, & Wells, 1997; Williams & Dritschel, 1988; Brittlebank et al., 1993; Jones, Heard, Startup, Swales, Williams, & Jones, 1999). Similarly, the fact that over-generality does not disappear when depression remits suggests that it is a lifelong cognitive style or trait rather than a state characteristic.

In support of the notion that over-generality is a trait characteristic, patients with BPD have also been shown to reveal significantly more over-general memories on the AMT than a matched control sample (Jones et al., 1999). However, contrary to prediction, individuals with a diagnosis of BPD who showed greatest over-general recall reported fewest parasuicidal acts during the previous 4 months (Startup, Heard, Swales, Jones, Williams, & Jones, 2001). If distressing memories increase emotional dysregulation (Reynolds & Brewin, 1999), and emotional dysregulation is a major cause of parasuicide (MacLeod et al., 1992), then Startup and colleagues propose that it is understandable that general recall would be associated with less rather than more parasuicidal behaviour. Thus, for some individuals with BPD, over-general memory may have a short-term adaptive function in helping to protect

individuals from the build-up of the kinds of thoughts, memories, and feelings that can spiral to cause self-harm.

#### 1.3.2.2 The process of memory retrieval and mnemonic interlock

A number of authors have attempted to account for problems in retrieval of specific memories. Based on Norman & Bobrow's (1979) descriptions theory, Williams (1997) suggests that memory for events in one's life is hierarchically organized, with the 'upper' layers containing general memory information that can act as pointers to the more specific and detailed 'lower' layers. His theory suggests that these upper layers are thought to act as intermediate stages in the laying down and later recollection of events. In recollecting an event it is proposed that individuals first find an 'upper layer' general description which is then used to search the 'lower layer' memory database for an appropriate memory. He suggests that suicidal and depressed patients become stuck in the intermediate stage, and fail to use the general descriptions they generate to help them retrieve specific memories. This phenomenon, which he terms 'mnemonic interlock', may act as a way of defending against the pain of remembering specific traumatic memories (Williams, 1996). Thus, whenever the memory system attempts to retrieve an event using a personal description, the description itself tends to activate other general self-descriptions. These may include global self-referent statements such as 'I've always been a failure'. Even mnemonic interlock relating to positive events may still have damaging consequences as the person does not have quick access to specific positive events which would allow them to generate specific ideas about how to bring about similar positive events in the future.



### 1.3.2.3 Over-general memory and problem-solving

An inability to generate specific solutions has important implications for the individual. Evans and colleagues (1992) compared the memory performance and problem solving ability of individuals who had recently taken an overdose with matched controls who were in hospital for surgery. They found that depressed patients were unable to produce as many alternative means of solving problems as the non-depressed controls using the Means-Ends Problem Solving Test (MEPS, Platt, Spivak & Bloom, 1971). In addition, when they did generate a solution, it was also rated as less effective. The results confirmed a significant correlation between low effectiveness of problem-solving strategies and over-general recall of autobiographical memories. This suggests that deficits in memory may play an important role in blocking access to effective solutions to current difficulties, increasing the sense of helplessness. A number of other studies have also suggested that parasuicidal patients display a deficit in their ability to solve interpersonal problems (Goodstein, 1982; Scotte & Clum, 1987; Rotherham-Borus, Trautman, Dopkins & Shrout, 1990; Williams, 1986) and that over-general memory recall possibly underpins the problem-solving deficit found in parasuicide (Sidley et al., 1997; Williams & Broadbent, 1986). Similarly, it has been noted that patients with BPD are passive in relation to solving their problems themselves, but are typically active in finding other people who can assist (Linehan, 1993). Evidence for 'active-passivity', the tendency to approach problems passively and helplessly, rather than actively and determinedly, can be found in work with individuals who display parasuicidal behaviour. Inpatients admitted for an immediately preceding parasuicide, compared to both suicide ideators and nonsuicidal psychiatric inpatients,

showed markedly lower active interpersonal problem solving and somewhat higher passive problem solving (Linehan, Camper, Chiles, Strosahl, & Shearin, 1987; Orbach, Bar-Joseph, & Dror, 1990). Similarly, Perry and Cooper (1985) report an association between BPD and low self-efficacy, high dependency, and emotional reliance on others. Such behaviour is similar to 'emotion-focused coping', as described by Lazarus and Folkman (1984). Emotion-focused coping consists of responding to stress provoking situations with efforts to reduce the negative emotional reactions to the situation e.g. by distraction or seeking comfort from others. In contrast, 'problem-focused coping', involves the individual taking direct action to solve the problem.

Self-harming behaviours can therefore be effective in eliciting help from the environment. In many instances, this is the only means an individual knows to gain attention from others (Linehan, 1993). In this context, the role of gender bias and sex-role stereotypes in inducing active passivity on the part of women cannot be overlooked. In general, girls are socialised to seek help for interpersonal problems (Hoffman, 1972). Furthermore, females are often restricted by cultural norms and expectations to indirect, personal, and helpless modes of influence (Johnson, 1976). For example, observational studies of school children indicate that following criticism, boys more often respond with active efforts, whereas girls have a greater tendency to fall into the passive mode of giving up and blaming their own lack of abilities (Dwek, Davidson, Nelson, & Emde, 1978).

The importance of memory in contributing to a parasuicidal individual's difficulties is therefore evident. Efficient problem-solving may be reliant on satisfactory

retrieval of specific autobiographical memories to provide a helpful and varied 'database' from which to construct solutions to real life problems (Williams, 1996). However, if the past is dominated with generalities, this may undermine an individual's ability to see an effective solution. In fact, the few interventions which have been shown to have a positive impact on parasuicidal repetition, have tended to incorporate a substantial problem-solving component (Salkovskis, Atha, & Storer, 1990; Linehan, 1993). However, Evans and colleagues (1992) suggest that it is not enough to simply provide problem-solving strategies, for this alone will not necessarily effect encoding, storage and retrieval of memory processes.

As mentioned previously, such memory problems also have an additional effect on how the future is viewed. Williams and colleagues (1996) found that subjects who were less specific about the past and future were more hopeless about the future. Hopelessness has been seen as a critical factor in mediating between depression and suicidality. In fact, the Beck Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974) has been shown to be a powerful predictor of parasuicide repetition at six months follow-up (Petrie, Chamberlain, & Clarke, 1988) and completed suicide up to ten years later (Beck, Brown, & Steer, 1989).

#### 1.3.2.4 Origins of over-general memory

Developmental psychologists have shown that retrieval of events in an over-general form is a normal developmental phase before specific-event memory emerges at the age of 3 to 4 years old (Nelson, 1988). Based upon circumstantial evidence, William's theory (Williams, 1997) suggests that for some children who experience

stressful events around this time, it is possible that over-general recall remains the preferred method of retrieval for events in their life. The same may be true of those children who have temperamental difficulty in controlling affect, a pattern associated with BPD (Linehan, 1993). Instead, a tendency to become self-focused means that attempts to recollect events leads to mnemonic interlock as a way of avoiding recall of specific events and therefore minimizing negative affect. It is postulated that the more disrupted the early experiences, the greater the tendency for new events to be encoded in a more schematic, less distinctive form (Williams, 1996). In support of this, adults with severe dissociative disorders (who nearly always have histories of extreme child abuse) do not merely have difficulty retrieving specific autobiographical memories; they are often entirely amnesic for large segments of their childhood history (Loewenstein, 1991). In addition, Kuyken and Brewin, (1995) found that many of the depressed women in their study who had a tendency to recall general memories compared with the control group, had been sexually abused in childhood and adolescence. Those women, whether or not they suffered from a trauma-related disorder, had greater difficulty in retrieving either positive or negative specific events from their past. However, a more recent study examining the role of childhood trauma, has suggested that a diagnosis of major depressive disorder was more effective in predicting autobiographical memory performance than self-reported childhood trauma (Wessel, Meeren, Peeters, Arntz, & Merckelbach, 2001). This finding casts some doubt on theories that emphasize the role of childhood trauma in over-general autobiographical memory. While it could be argued that there were differences in the level of abuse histories between the participants in the two studies, the latter study, at the very least, indicates that childhood trauma is not the only pathway to an over-general autobiographical memory. It may well be the

case that for patients diagnosed with depression and/or post-traumatic stress disorder, it is the occurrence of intrusive memories rather than a history of trauma per se that acts as the primary determinant of over-generality.

While over-generality has been examined for its association with a wide range of emotional difficulties, as yet, it has not been examined for its association with self-injurious (as opposed to parasuicidal) behaviour, or the affect of shame which is frequently reported by individuals with histories of abuse and/or trauma. The psychology of shame and its possible role in self-injury is discussed in section 1.3.4 (p. 41). In order to understand shame it is necessary to discuss the notions of social comparison and social rank.

### **1.3.3 Social rank and self-injurious behaviour**

Festinger (1954) developed the first comprehensive theory of social comparison. Since then various modifications to his theory have been made. Nevertheless, research has shown that social comparison is ubiquitous in social relating between individuals (Wood, 1989) and in groups (Sidanius, Pratto, & Bobo, 1994). Social comparison may either involve estimates of relative social rank (inferior-superior, weaker-stronger), or comparisons of similarity-difference (Furnham & Brewin, 1988; Gilbert, 1992). Suls and Wills (1991) suggest that social comparison can be used to self-enhance, self improve, decide whether or not to challenge or submit in conflict situations or to avoid shame. More specifically, studies indicate that individuals with high self-esteem socially compare to draw attention to their talents and abilities, while people with low self-esteem opt for damage limitation, self protection and

minimizing exposure of their weak points, i.e. they are shame avoidant (Baumeister, Tice, & Hutton, 1989). However, there have been many therapeutic observations suggesting that a tendency to compare oneself unfavourably with others and to view oneself as inferior in some way, is associated with a variety of interpersonal problems and psychological difficulties. Such problems include low self-esteem (Coopersmith, 1967), social anxiety (Beck, et. al., 1985), depression (Beck, et al., 1979; Swallow & Kuiper, 1988), stress (Buuk & Hoorens, 1992), envy and jealousy (Salovey, 1991), submissive behaviour and neuroticism (Gilbert & Allan, 1994) and shame (Kaufman, 1989).

#### 1.3.3.1 The evolutionary theory of social rank

Gilbert, Price and Allan (1995) propose that the power of social comparison to inhibit or facilitate social behaviour, and its link with psychopathology, may result from the circumstances of our evolution. Darwin (1871) highlighted that alongside natural selection, a social process was operating within species to determine which individuals in each generation reproduced. He suggested that the animals which were successful in reproducing showed major differences in behaviour compared to those who did less well in terms of reproduction. In particular, they were able to 'out-compete' others who were pursuing the same resources (Gilbert, 1989). More recently, Parker (1974, 1984) also argued the importance of social comparison in the formation of hierarchies and group cohesiveness within animal populations. In primates, social hierarchy dictates reproductive and social success. Thus, those who are 'high-ranking' within the hierarchy have more chance of breeding than those who are 'low-rank'.

In the ordering of social hierarchies, it has been hypothesised that social comparison enables the opportunity to carry out an internal cost-benefit analysis in order to decide whether or not to engage in a fight. This basic evaluation process is based upon a self-concept that has been termed 'resource-holding potential' (RHP) (Gilbert, Price, & Allan, 1995). The animal's own resource-holding potential (an estimate of fighting capacity depending on size, strength, skill, previous success etc.) is compared with that of a potential adversary (Parker, 1974, 1984). This allows the animal the chance to avoid continually challenging those who could easily defeat them, as this would risk injury and waste energy. Thus, it is in the subordinates best interest to send a 'no-challenge' signal via their non-verbal behaviour. This may influence the emotions and behaviour of the potential attacker, so that they either break off or limit their attack (Gilbert, 2000a). Submissive and subordinate displays often involve behaviours such as eye gaze avoidance, fear grimacing, withdrawal/flight and/or avoidance if challenged (Gilbert, 2000b). On the other hand, it is important to challenge those who can be beaten in order not to miss out on opportunities. This leads to the basic evolved rule of 'challenge those weaker and submit to those stronger' (Hinde, 1987, p. 64). In this way a status hierarchy emerges from the preparedness of the winner to threaten and the loser to submit (Price, 1988). In turn, the population becomes spread along the dimension of successful-unsuccessful in terms of reproductive success and access to resources that facilitate reproductive success (Gilbert et al., 1995).

In humans, the concept of RHP is thought to be closely related to the concept of self-esteem (Wenegrat, 1984). Thus, self-esteem may fall with loss of reproductively useful resources (e.g. loss of allies, failing to be chosen to gain a position within

society, or when actions are controlled by a more powerful other). However, his theory suggests that it is not necessarily the case that low self-esteem and a tendency to make unfavourable social comparisons are maladaptive; rather they may reflect alternative strategies for coping in an environment where others are seen as more powerful and where the preferred response is to adopt a non-challenging position to the external world. Thus, individuals may develop low self-esteem in response to depression, which may involve current experiences of being defeated or feeling powerless (Price, Sloman, Gardner, Gilbert & Rhode, 1994). Alternatively, there is evidence that self-esteem and social comparisons reflect certain child rearing patterns and early peer group experiences (Dunn & McGuire, 1992), which may later lead to social anxiety, fearfulness, inhibitedness, susceptibility to separation difficulties and proneness to dysphoria (Swallow & Kuiper, 1988). In particular, authoritarian parenting appears to increase susceptibility to disorders involving low self-esteem such as anxiety and depression (Gerlsma, Emmelkamp, & Arrindell, 1990). In addition, refraining from seeking help or support can arise, particularly if this is seen as a weakness and lowers self-esteem, due to unfavourable social comparisons and shame (Buunk & Hoorens, 1992).

#### 1.3.3.2 Social attention holding power (SAHP), attractiveness and 'group fit'.

While for most animals, the social threat is aggression, for humans the threat that triggers submissive displays is more commonly related to loss of acceptance and approval. Rather than intimidating others with demonstrations of RHP, humans often attempt to demonstrate attractive and attracting attributes of themselves (e.g. intelligence, physical attractiveness and athletic ability) (Barkow, 1989; Gilbert,



1989, 1997a). Thus, in humans, there appear to be two primary dimensions of social rank. The first, similar to RHP found in animals, relates to relative strength, power and aggressiveness (i.e. the ability to win fights and to meet challenges), while the second dimension termed 'social attention holding power' (SAHP), relates to the ability to direct favourable attention to the self via attractiveness and talent (i.e. the ability to win contests which are judged by others; being chosen for a job or as a friend or lover) (Kemper, 1990; Gilbert, 1989, 1992). By social comparison the individual is able to estimate what others will find attractive and change behaviour accordingly. Obviously, which behaviours are rewarded depends upon the values of the group. Thus, a person may only be interested in how they look compared to others if 'appearance' is a valued domain. Choosing where to place efforts to gain status, whom to compare with, and how to maintain or increase status, rely on social comparative information (Gilbert et al, 1995). Having traits that others will value is crucially related to a sense of self-worth and self-esteem (Santor & Walker, 1999) and high SAHP can be maintained via receiving positive signals (e.g. approval, admiration, being wanted etc.). Conversely, receiving signals about lack of attractiveness (or unattractive behaviour) can often lead to a fall in RHP or SAHP in a valued domain and various defences such as anxiety, anger, shame and resentment can be activated (Gilbert, 1992).

In humans, there is also an evolved need for kinship and a sense of belonging (Bailey, Wood, & Nava, 1992). Therefore as well as evaluating relative rank and social standing, humans also make comparisons of relative similarity to others (e.g. political values, religious beliefs etc.). In support of this, in clinical observations the dimension of comparison appears to be 'same-different' rather than 'inferior-

superior' (Allan & Gilbert, 1995). Similarly, in groups, aggressive children are more accepted and have higher status if the group is aggressive but not if it is relatively peaceful (Wright, Giammarion & Parad, 1986). Thus, the degree of similarity or 'fit' of a member to their group is important to rank and popularity (Abrams, Cochrane, Hogg, & Turner, 1990), and some of the stress of making unfavourable social comparisons may well arise from the potential loss of a sense of kinship and affiliation. This in turn may lead to a fear of rejection, marginalisation, becoming an outsider and consequently, loss of support (Allan & Gilbert, 1995). Alternatively, unfavourable social comparisons in the domains valued by society may lead some to opt out of the group and its value judgements and seek out alternatives (e.g. street gangs) (Gilbert et al., 1995). In this context, some individuals may even attempt to gain notoriety by exploiting societal values. It is important to note that a combination of feeling different and superior is likely to have different effects to that of feeling different and inferior. While the former may not necessarily result in psychological difficulties, the latter is likely to result in shame (Kaufman, 1989; Buunk & Hoorens, 1992; Gilbert, 1992) and/or depression (Furnham & Brewin, 1988).

Using the Social Comparison Scale (SCS, Allan & Gilbert, 1995), it was found that in a student population, perceived social rank, attractiveness, and group fit correlated significantly with measures of psychopathology (Allan & Gilbert, 1995). In support of this, it has been shown that individuals in low status positions are more: vigilant to social threats; tense; vulnerable to a variety of disorders; have higher levels of cortisol (Sapolsky, 1994), and lower blood levels of 5-HT (Raleigh, McGuire, Brammer, & Yuwieler, 1984). Hartmann (1992) points out that physiological

changes are often the consequence of rank changes rather than the cause. Nevertheless, low rank individuals engage in submissive behaviour at a much higher frequency than those who are dominant (Ray & Sapolsky, 1992; Gilbert & McGuire, 1998) and such behaviour is neither seen as attractive, attracting or adaptive (Gilbert, 2000b).

#### 1.3.3.3 Sensitivity to social put-down

Gilbert's theory (Gilbert, 1992) suggests that humans have an innate need to be seen as attractive to others, therefore signals of criticism or disapproval are perceived as attacks on status, personal attractiveness and acceptability. In fact, experiences of criticism and social put-down are known to be associated with mental health (Jenkins & Karno, 1992). The concept of high expressed emotion (E.E.), an index of patterns of aversive interactions of intrusiveness and criticism within families with a person suffering from schizophrenia, has been associated with higher rates of relapse (Vaughn & Leff, 1985). Perceptions of and reactions to, criticism have also been explored in literature relating to shame (Tangney, 1996), social anxiety (Watson & Friend, 1969), and anger-aggression (Cohen, Vandello, & Rantilla, 1998). Similarly, individuals with depression who live with a critical spouse tend to have higher rates of relapse compared to depressed people who live with a more supportive partner (Hooley & Teesdale, 1989).

The Sensitivity to Social Put-Down Scale (SPD, Gilbert & Miles, 1999) was developed in order to explore how anxious or angry people feel following criticism. In a non-clinical population, it was found that feeling anxious/distressed as a result of

criticism was highly correlated with feeling angry. This indicates that being criticised invokes complex patterns of negative affects (Watson, Clark, Weber, Assenheimer, Strauss, & McCormick, 1995). However, self-blame was particularly related to feeling anxious/distressed but only minimally to blaming others. In addition, individuals who saw themselves as relatively down rank (as measured by the Social Comparison Scale) tended to blame themselves for criticism, while those who felt relatively superior, tended to blame others. Further to this, self-blame was associated with psychopathological variables such as social anxiety, depression, shame, fear of negative evaluation, increased anger proneness and hostile attitudes. Thus, it appears that blaming others may offer some protection from aversive self-conscious affects (Gilbert & Miles, 1999).

#### 1.3.3.4 Social put-down and violence

Being the recipient of criticism and social put-down can lead to feelings of shame and 'grievance anger' which may result in the recipient counter-attacking either verbally or even in the form of violence (Tedeschi & Felson, 1994). In fact, a common eliciting event in homicide is an attack (usually verbal), or slight on the self, where violence involved some form of face-saving (Daley & Wilson, 1988). Attitudinal and cultural factors are thought to influence the degree to which individuals feel that they have a right to counter-attack in defense of their honour following insults and put-downs (Cohen et al., 1998).

Serin (1991) found that psychopathic<sup>2</sup> individuals, who routinely come into contact with the criminal justice system, were more likely to commit a violent offence, to use weapons and to make threats of violence, than were non-psychopaths. In terms of sensitivity to social put-downs, psychopaths became angrier in response to provocative hypothetical scenarios than did other prisoners. More specifically, Morrison & Gilbert (2001) compared primary and secondary psychopaths<sup>3</sup> in their perceptions of social rank, internal shame, and anger. As predicted, primary and secondary psychopaths differed significantly in their self-evaluative and social evaluative processes. In response to provocation, primary psychopaths perceived themselves to be significantly higher in social rank but lower in shame, anger, self-blame and anger towards others than secondary psychopaths. It appears that primary psychopaths assume dominance and threaten others who challenge them, while secondary psychopaths assume defensive, subordinate positions within a psychopathy hierarchy. The latter may seek dominance but are sensitive to attacks from both those of higher and lower social rank.

Beck (1979) suggests that self-esteem lowering experiences (e.g. being criticised, bullied, feeling disliked or unwanted) may be one of several factors which might predispose prisoners towards depression and/or suicide. However, few studies to date have systematically investigated specifically how people perceive and react to experiences of social put down (Gilbert, 1992; Allan & Gilbert, 1997). As yet, no

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<sup>2</sup> Psychopathy is a personality disorder that is associated with a constellation of affective, interpersonal, and behavioural characteristics. Psychopaths display shallow and short-lived emotions, are lacking in empathy, guilt and remorse, are unable to form lasting bonds with others, and have a general disregard for the consequences of their actions on others (Hare & Forth, 1993).

<sup>3</sup> 'Primary' psychopaths are described as extroverted and self-confident with low to average anxiety. In contrast, 'secondary' psychopaths are characterized by social anxiety, moodiness, low self-esteem and social withdrawal (Blackburn, 1998).

research has been carried out to ascertain the degree to which threats to social rank impact on non-psychopathic offenders, particularly in relation to self-injurious behaviour.

#### **1.3.4 Shame and self-injurious behaviour**

The word 'shame' comes from the Indo-European word 'skam' meaning 'to cover' and implies a fear of exposure (Lewis, 1992). On a similar note, the Oxford English Dictionary defines shame as 'feelings of humiliation excited by consciousness of guilt or shortcoming, of having made oneself or being made ridiculous or having offended against propriety modesty or dignity'. While there may be agreement that it is a consequence of social or moral transgression witnessed by others, there is a wide variety of explanations to account the existence of shame:

'Is this the manifestation of pathological narcissism, or the failure to maintain good object relations, is it a sadomasochistic enactment? Or is it the powerful imprinting of traumatic early events, of incest and sexual trauma, of brutal parenting or cruel education, the consequence of victimization?' (Pines, 1995, p. 352).

Significant contributions to the study of shame have come from the exploration of the superego (Wurmser, 1987), of narcissism (Morrison, 1987) and identity (Lynd, 1958; Lewis, 1971). Shame has also been studied using affect (Nathanson, 1992), affect-cognitive (Lewis, 1995), and cognitive behavioural (Beck, Emery, & Greenberg, 1985) theories. Some developmental psychologists believe shame can occur in the first few months of life (Nathanson, 1992, Schore, 1994), while others

suggest that it is a social emotion starting at around 2 or 3 years of age (Lewis, 1993). Theorists propose that shame may develop as a result of an unresponsive or negatively responsive early maternal environment, or experiences of involuntary submission which may impede a healthy and cohesive sense of self (Lewis 1987; Mollon, 1984; Gilbert, 1989; Andrews, 1995, 1997). Nevertheless, it is largely agreed that predisposition to the 'affect of inferiority' is universal and that it is regarded as one of the most powerful, painful and potentially destructive experiences known to humans (Kaufman, 1989). Shame-proneness is now recognised to be a major vulnerability factor for psychopathology including alcoholism (Brown, 1991), depression (Allan, Gilbert, & Goss, 1994; Andrews, 1995), hostility (Retzinger, 1995; Tangney, Wagner, Fletcher & Gramzow, 1992a), social anxiety (Gilbert & Trowser, 1990), personality disorders, particularly narcissism (Kinston, 1987; Wurmser, 1987) and suicide (Mokros, 1995). While some authors note that shame affects both the onset and the course of disorders (Mollon, 1984; Lewis, 1986; Kaufman, 1989; Schore, 1994; Andrews & Hunter, 1997), others have viewed shame as a concomitant and integral part of the disorder (Kaufman, 1989). In addition, shame has been seen to be evoked in response to symptoms of psychopathology. For example, males with post-traumatic stress disorder following an assault may experience a sense of shame not only in response to being unable to protect themselves at the time, but also as a consequence of feeling frightened when reminded of the event (Joseph, Williams, & Jule, 1997; Andrews, Brewin, Rose, & Kirk, 2000). Finally, the avoidance (and repair) of shame has been linked to social practices as diverse as honor killing (Brooks, 1995), inter-male violence to 'save face' (Daly & Wilson, 1994), and domestic violence (Dutton, van Ginkel, & Starzomski, 1995).

#### 1.3.4.1 Shame and other emotions

A number of other emotions are frequently associated with shame including guilt, humiliation and anger. In guilt, the focus of attention is outside of the self and there is a desire for reparation, whereas in shame the emphasis is on the self and there is a desire to conceal (Tangney, Miller, Flicker, & Barlow, 1996). Humiliation is the experience of being made to feel humble or having one's dignity or self-respect injured. It is accompanied by cognitions of the 'other' as being at fault or unjust and a strong desire to retaliate (Gilbert, 1997a, 1998; Miller, 1988). People often feel responsible for and deserving of their shame, whereas they do not feel their humiliations are justified (Klein, 1991). It is the sense of injustice, unfairness and desire to retaliate that can fuel aggression. As mentioned previously, anger is a common experience of feeling shamed or criticised (Tangney, Hill-Barlow, Wagner, Marschall, Borenstein, Sanfter, Mor, & Gramzow, 1996) and shame has been shown to be associated with increased anger proneness (Tangney, Wagner, Gramzow, 1992). However, Andrews and colleagues (2000) found that when anger was differentiated into anger directed at the self and anger at others, shame was associated with self-directed anger but not other-directed anger. This implies that social put-down or criticism may lead to either shame or 'righteous indignation' depending upon whether the recipient believes the criticism to be valid (Gilbert, 1998, Tangney, 1995). Thus, shame and anger are thought to have opposing fundamental concerns. From an evolutionary perspective, shame is concerned with defeat (Gilbert, 1997a), while anger (at others) is concerned with counterattack and survival (Novaco, 1976). Understandably, there is often a desire to conceal a display of shame (Retzinger, 1991) and it is believed that dominant (high ranking)



individuals can hide their shame in anger far easier than can subordinates (Gilbert, 1998).

#### 1.3.4.2 Social theories of shame

Social theorists have long recognized the motivational importance of attempting to create a positive image in the minds of others (Leary & Kowalski, 1990). The experience of shame is therefore a consequence of failed efforts to control the image we wish to create in the minds of others in addition to the fear of the response we are likely to elicit. Gilbert (1998) views shame as 'an inner experience of self as an unattractive social agent, under pressure to limit possible damage to self via escape or appeasement' (p. 30). According to social rank theory, the internal experiences of shame are derived from submissive strategies where one seeks to signal to the self and others an awareness of loss of social standing and to limit possible damage (Gilbert, 1997a). Thus, an individual who successfully shames another usually produces inhibition, anxiety, submissive postures and concealing, hiding and escape-motivated behaviours in the one shamed (Gilbert, 1997a). However, simply feeling inferior is not sufficient to evoke shame. It is the undesired involuntary nature of inferiority, subordination, loss of attractiveness or exclusion from significant others that is important.

Andrews (1998) suggests that there are three components to the shame experience. These include an emotional response (feeling ashamed, guilty, angry, humiliated or debased), a cognitive response (concern about other's opinions of the self and/or one's behaviour) and finally a behavioural response (hiding or concealment of

deficiencies). Historically, shame has been associated with either a consciousness of how one is seen by others (Satre, 1943) or with a negative self-evaluation. Gilbert (1998) distinguished between these two facets of shame and termed them 'external' and 'internal' shame. While these two cognitive domains are thought to be highly correlated (Lewis, 1971), this is not necessarily the case. Gilbert (1998) argues that one can be shamed for appearing to lack feelings of (internal) shame. For example, an individual who sexually abuses children may not experience internal shame due to the pro-offending belief that their actions are not wrong, but may feel ashamed (external shame) at the scrutiny of others after being caught.

A number of self-report measures have been developed to try to assess shame proneness. Cook (1993) developed the Internalized Shame Scale (ISS), involving perceptions of personal inadequacy, inferiority and weakness. Studies using this measure suggest that internal shame is associated with a range of psychopathologies (Cook, 1993, 1996). External shame, derived from beliefs about how others see the self, has also been investigated using items from the Internalized Shame Scale turned into the judgements of others. The Other As Shamer Scale (OAS, Goss, Gilbert & Allan, 1995) was found to be highly correlated with the Internalized Shame Scale in a student sample. This implies that within this population, if a person sees him/herself as inadequate/inferior then he/she tends to think that others do too. Both measures were found to be correlated with shame-proneness, depression, (Goss et al., 1995), a variety of interpersonal problems and recall of unfavourable parenting (Gilbert, Allan, & Goss, 1996).

#### 1.3.4.3 Focus of shame

The focus of shame may relate to personal shortcomings, personal behaviour and/or other's behaviour to oneself. Regardless of the domain, a display of shame from an individual, conscious or otherwise, may indicate to others that they are in a state of 'fearful compliance' and that further signs of rejection are not necessary.

Goffman's (1963) work on stigma suggests that we may feel ashamed of who we are as well as what we do. Writing in the 1960s, he suggested that there is only a small section of the population that is exempt from experiencing stigma ('white, upper-class, well-educated, well-employed, physically adept, married males of good height and physique with pleasing facial features'). Whilst the boundaries of acceptance may have broadened forty years on, the notion that individuals who do not measure up to the accepted standards of society in terms of appearance, behaviour and/or conduct, have a 'spoiled identity', endures. Those who are unable to manage their 'shameful differentness', have a greater tendency to feel shame. Since physical appearance (attractiveness) is one of the first points of social contact, shame relating to the body can have serious effects on social behaviour and confidence. In fact, bodily shame is often a salient factor in chronic depression in abused women (Andrews, 1995, 1997). In terms of personal behaviour, failure to reach certain standards can also be a source of shame. This may occur when children grow up in an environment where they only feel accepted and loved if they demonstrate abilities to achieve certain standards and goals. Thus, failure brings intense feelings of shame and loss of approval from meaningful others. In addition, the inappropriate behaviour of perpetrators may also involve 'victim' shame by association. As

mentioned previously, traumatizing experiences such as sexual and physical abuse usually give rise to a range of extremely negative feelings including shame, self-blame, guilt, self-hatred and the conviction that one is 'bad', 'evil', or 'dirty'. It may also lead individuals to view their bodies as contaminated, as well as alien and 'traitorous' to themselves. Some theorists suggest that a sense of 'disgust' is the primary affect underpinning shame (Power & Delgleish, 1997). It has been argued that children who were abused internalise the shame and victimization which may have characterised their families for generations, developing 'shame-based survival skills' (including self-mutilation) to cope with their experiences (Wise, 1990).

#### 1.3.4.4 Implications for therapy

Shame in therapy can exert a major impact on both patient and therapist as each shift around attempting to avoid being shamed and having inadequacies exposed (Kaufman, 1989). In particular, theorists suggest that shame may evolve around sexual and aggressive feelings and fantasies, resulting in attempts to suppress them. The ability to explore such painful feelings may be extremely difficult, particularly for those who have learnt to be ashamed of expressing a need for emotional support (Osherson & Krugman, 1990). Consequently, recognition of shame proneness and defences against it can enhance the therapist's sensitivity. Similarly, such an awareness allows the therapist to be more able to recognise 'by-passed' shame, that is the sudden dissociation that can indicate that the patient is threatened by the emergence of painful affect. Speaking to patients openly about shame may have a powerful effect, with some patients who thereafter feel better understood and accepted by the therapist (Pines, 1995).

#### **1.4 Treatment implications for self-injury**

The management of self-injury is extremely difficult (Feldman, 1988). Self-mutilation can be frightening for professionals and for patients. Staff may experience a range of emotions including shock, disgust, sadness, anger, inadequacy and powerlessness (Babiker & Arnold, 1997; Frances, 1987; Novotny, 1972). In addition, there are huge financial implications involved in the medical and psychological treatment of individuals who self harm. While the general literature in this area is extensive, in terms of studies investigating various treatment models, there are methodological difficulties. In particular, some studies investigate individuals who engage in suicidal behaviour, others are concerned with self-injury, some even involve mixed samples, despite the fact that there are clearly conceptual differences between these behaviours.

Nevertheless, for the individual patient a number of forms of psychological therapy have been advocated. Perhaps the most widely used is psychodynamic psychotherapy (Clarkin, Foelsch, Levy, Hull, Delaney, & Kernberg, 1999; Clarkin, Yeomans, & Kernberg, 2001; Suyetomo, 1998). Improvements in patients undergoing such therapy have been attributed to their ability to understand the origins of their behaviour and their increased ability to verbalise their feelings. In the delivery of this type of intervention, many authors emphasize the need to be cautious about premature interpretation of behaviour, and the need to concentrate on making the patient feel secure and safe in therapy. Modifications of this approach, in particular cognitive-analytic therapy (CAT) have also been recommended (Ryle, Poynton, & Brockman, 1989). Cognitive-behavioural approaches include dialectical-

behaviour therapy (DBT) which aims to distinguish parasuicidal behaviour, whilst at the same time working on encouraging alternative ways of signalling distress and more generally, adjusting to life. In particular, there is an emphasis on the reduction of self-hate and shame, and for patients to try to construct their own detailed, consistent version of their experiences (Linehan, 1993). Group therapy exclusively for self-harming patients has also been presented as a method of treatment (Walsh & Rosen, 1988) sometimes in conjunction with individual sessions (e.g. Linehan, Tutek, Heard, & Armstrong, 1994). Such treatment aims to improve interpersonal skills, to discuss the implications of self-harm as a means of obtaining intimacy and nurturance, and to develop alternative methods of obtaining care.

Hawton and colleagues (1998) conducted a systematic review of twenty randomised controlled trials of psychosocial treatments in preventing repetition of self-harming behaviour. They concluded that although problem solving therapy (McLeavy, Daly, Ludgate, & Murray, 1994) and dialectical-behaviour therapy (Linehan, 1991) appeared promising, there was a considerable lack of information as to which strategies are actually effective. Particular shortcomings of studies cited included a lack of consistency in the defining and measuring of self-harm and the inclusion of too few subjects to have the statistical power to detect clinically meaningful differences in rates of self-harm between experimental and control treatments. Clearly, a great deal more work needs to be done in order to improve treatments based upon our increasing understanding of self-harming behaviour. The effectiveness of new approaches should in turn be evaluated in a systematic and meaningful way.

Finally, for many types of therapy the first obstacle to overcome is the issue of disclosure. McDonald & Morley (2001) investigated non-disclosure of emotional experiences in patients referred to an NHS psychotherapy service. They found that 68% of emotional incidents recorded in a diary were not disclosed. Subsequent interviews revealed that participants appeared to be habitual non-disclosers of emotional and personal experiences and that non-disclosure was related to the anticipation of negative interpersonal responses (in particular being labelled and judged). In addition, 74% reported more self-critical factors such as shame. This mixture of self-related and other-related appraisals suggests that the shame associated with non-disclosure is embedded in broader interpersonal schemata relating to how a person expects to be regarded and treated by other people (McDonald & Morley, 2001). This is congruent with Lewis' (1971) notion of 'superego shame' which includes imagery of a punitive and judging 'other' alongside imagery of the self as weak and inadequate. This seems to reflect Gilbert's (1998) notion of 'internalised' and 'external' shame.

## 1.5 The study

The aim of the current study is to investigate the relationship between particular variables believed to be associated with self-injurious behaviour in a forensic population. On the basis of the findings outlined above, the following predictions were made. Individuals who self-injure will be more likely to have:

- i) more 'shaming' experiences during childhood (i.e. sexual or physical abuse, and/or being bullied);
- ii) a greater tendency to have histories of alcohol and/or drug abuse;
- iii) difficulties in self-capacities (relatedness, identity and affect regulation),
- iv) over-general memories,
- v) view themselves as lower social rank and
- vi) have higher levels of external shame, than those individuals who have never engaged in self-injurious behaviour.

The study will also examine whether levels of shame are better predictors of over-general memory than levels of depression. In addition, it is predicted that individuals who engage in self-injury will be more likely to report becoming anxious/distressed and angry with themselves (as opposed to others) in response to social-put downs and criticism than those individuals who have never engaged in self-injurious behaviour.

Finally, it is predicted that the act of self-injury itself will be associated with changes in an individual's perceived social rank. Thus, it is anticipated that just prior to self-



harming behaviours individuals will report perceiving a dramatic `fall' in terms of social rank compared with their `general' perception. Following the act of self-injury, their perception of social rank is expected to return to `normal' levels relative to their own base-rate.

## **Method**

This chapter outlines the design of the study, the selection of participants and the measures used. It will describe the procedures followed throughout the study and, where appropriate, clarify the rationale for methodological decisions taken.

### **2.1 Aims**

The project aims to investigate the relationship between perceived social rank and self-injurious behaviour in patients detained in a high security hospital. Participants are asked to complete a number of self-report questionnaires designed to measure feelings and attitudes to social put-down and criticism and levels of shame. The study also examines possible links between an individual's level and quality of self-capacities (e.g. relatedness, identity and affect regulation), autobiographical memory, levels of depression and self-injurious behaviour.

### **2.3 Participants and setting**

All participants were in-patients in a high security hospital. Inclusion criteria for patients in the experimental group were as follows: consent to participation; a primary diagnosis of personality disorder or mental illness and at least one episode of self-injurious behaviour in the last five years<sup>1</sup>. Inclusion criteria for the comparison

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<sup>1</sup> Self injury was defined as an act which involves deliberately inflicting pain and/or injury to one's own body, but without suicidal intent (Babiker & Arnold, 1997). Recorded episodes included incidents of cutting/interfering with the healing of wounds, inserting foreign objects, swallowing objects, headbanging/inflicting blows to the body, punching walls or windows and finally, burning e.g. with cigarettes or boiling water. Where suicidal intention could not be easily established e.g. self-strangulation via the use of ligatures, such episodes were not included. Similarly, indirect self-

group included consent to participation, a primary diagnosis of personality disorder or mental illness and no record of self-injury in the last five years together with no known history of self-injurious behaviour.

Unfortunately, due to the limited numbers of individuals available to approach, the groups were smaller than anticipated. In particular, there were only six females who met the criteria for the comparison group (see section 2.4, p. 57 for recruitment procedure). Consequently, only male participants were approached for the comparison group.

### 2.2.1 Demographics

Participants eligible for the experimental group consisted of both male and female patients with a history of self-injurious behaviour (N=58 men, 17.7% of the hospital population; and 44 females, 57.9% of the population). Thirty-seven men were not included in the study for the following reasons. In 13 cases the RMO or nursing staff considered the patient too unwell to be approached, 12 men declined to take part and 3 were on trial leave from the hospital. A further 9 men were excluded as their episodes of apparent self-injurious behaviour were equally appropriately classified as aggressive behaviour (e.g. one or two incidents of punching objects). Thirty-one females were also not included in the study. In 4 cases the RMO or nursing staff considered individuals too unwell to be approached, 26 females declined to take part and 1 patient died just prior to interview.

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destructive behaviours such as eating disorders and substance abuse (Ross & McKay, 1979) and body 'enhancement' behaviours such as tattooing and excessive piercing were not included.

### Group one: Male self-harmers

Twenty-one male participants were interviewed in the experimental group, a 64% response rate for those approached. Their ages ranged from 21 to 41 years with a mean age of 31.1 years (standard deviation = 6.99). The majority of the patients had a documented history of serious interpersonal violence. Ten had been convicted of homicidal offences, 4 of other violent offences, 4 of sexual offences and 3 of criminal damage offences. Twelve of the sample were detained under the Legal Category of Psychopathic Disorder, 5 under Mental Illness and 4 under both. Of these, 2 were residing on 'low' support wards, 13 on 'medium' dependency and 6 on 'high' dependency wards. The majority of the patients were Caucasian (N=20) and one described his ethnic origin as "Black African". Finally, the number of episodes of self-injury per year ranged from 0.20 to 15.2 with a mean of 2.6 times per year and median of once a year (standard deviation = 3.9). The most frequent method used was cutting/interfering with the healing of wounds.

### Group two: Female self-harmers

Thirteen female participants were interviewed in the experimental group, a 33% response rate for those approached. Their ages ranged from 20 to 36 years with a mean age of 28.1 years (standard deviation = 5.33). Two had been convicted of homicidal offences, 3 of other violent offences, 5 of criminal damage offences, 1 of property offences, and 1 had no index offence. Four of the sample were detained under the Legal Category of Psychopathic Disorder, 5 under Mental Illness and 4 under both. Of these, 1 was resident on a 'low' support ward, 6 on 'medium'

dependency and 6 on 'high' dependency wards. The majority of the patients were Caucasian (N=12) and one described her ethnic origin as "Black Other". Number of episodes of self-injury per year ranged from 2.4 to 82.9 with a mean of 18.4 times per year and median of 9.8 times per year (standard deviation = 21.6). Again, the most frequent method used with cutting/interfering with the healing of wounds.

### Group three: Male non self-harmers

Finally, 15 male patients were interviewed for the comparison group. Their ages ranged from 28 to 54 years with a mean age of 39.8 years (standard deviation = 8.58). Five had been convicted of homicidal offences, 3 of other violent offences, 5 of sexual offences and 2 of criminal damage offences. Nine of the sample were detained under the Legal Category of Psychopathic Disorder, 5 under Mental Illness and 1 under both. Of these, 4 were on 'low' support wards, 10 on 'medium' dependency and 1 on a 'high' dependency ward. The majority of the patients were Caucasian (N=14) and one described his ethnic origin as "Black African".

## **2.3 Ethics**

Ethical approval for the research was obtained from Broadmoor Hospital Authority Ethics Committee on 23 March 2001 (see appendix I). One measure, the Self-Injury Motivation Scale (SIMS, Osuch, Noll, & Putnam, 1999) was removed from the study as it was rejected by the Ethics Committee.

## 2.4 Procedure

For all resident patients within the hospital on 2nd April 2001 (N=403; 327 males and 76 females) information regarding episodes of self-injury in the last 5 years was collected via incident report forms routinely completed by nursing staff. For those patients eligible for the study (N=102) due to their history of self-injurious behaviour, and those who were interviewed for the comparison group (N=15), demographic information was collected from their files. This included: age, index offence, legal category for detention, ethnic origin, estimated IQ<sup>2</sup>, ward dependency, and length of time since admission. Finally, relevant background details such as a previous history of self-injurious behaviour, childhood sexual or physical abuse, experiences of being bullied and drug and alcohol problems were obtained where possible from psychiatric and social work reports.

Individuals in the comparison group were matched as closely as possible with those males in the experimental group on a number of variables including age, ethnic origin, legal category, index offence, and ward dependency.

Consent to approach patients was obtained by writing to the Responsible Medical Officer on each ward (see Appendix II). Where consent was given, an appointment was made with each patient to discuss the research (see Appendix III for written information). A full briefing was then given as part of the consent procedure for those individuals who wished to participate and a further appointment was arranged.

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<sup>2</sup> As part of the assessment process upon admission to the hospital an estimated IQ is typically derived from a composite of subtests as opposed to administration of the full Wechsler Adult Intelligence Scale (WAIS-III).

During the interview, which lasted approximately 1½ hours, all questionnaires were read aloud by the examiner who recorded the participant's responses.

## **2.5 Design**

The first stage of the study involved a cross-sectional, between groups design, in order to examine differences between individuals who had self-injured in the last 5 years (Group 1) and those who had never self-injured (Group 3). The second part of the study involved a within group design (Groups 1 & 2) in order to further examine the relationship between social rank and deliberate self-harm.

## **2.6 Measures (see appendix IV)**

Following pilot testing (for feasibility) on a colleague, the following self-report measures were presented in the order below. Measures were chosen for their relevance to the hypotheses and with the participant's tolerance of multiple questions in mind e.g. short-form of BDI.

### **2.6.1 Inventory of Altered Self-Capacities (IASC, Briere, 1998)**

The inventory of Altered Self-Capacities (IASC) is a published 63-item test of seven types of self-disturbance in the areas of relatedness, identity, and affect regulation. The various scales of the IASC assesses the following domains: interpersonal conflicts, idealization-disillusionment, abandonment concerns, identity impairment, susceptibility to influence, affect dysregulation, and tension reduction activities. Reliability alpha coefficients (Cronbach, 1951) for a clinical sample ranged from

0.86 to 0.93, indicating high internal consistency and reliability (Bierre, 1997a). The manual for the IASC includes considerable data relevant to the validity of the inventory.

#### 2.6.2 Autobiographical Memory Test (AMT) Williams & Broadbent, 1986).

Based on C.G. Jung's cue-word method as adapted by Lloyd & Lishman (1975), the Autobiographical Test was used as a method of assessing personal event memory in individuals. The cue words used, and the procedure followed, was identical to that adopted in the Williams and Broadbent (1986) and Evans, Williams, O'Loughlin, and Howell (1992) studies.

Five positive words (happy, safe, interested, successful and surprised) and five negative words (sorry, angry, clumsy, hurt, and hostile) were read aloud to each patient in a fixed order (starting with a positive word), alternating between positive and negative words. In addition, the words were simultaneously presented to the patient in the form of printed cue-cards. For each cue word participants were asked to recall an event that the word reminded them of. It was explained that the event could be either important or trivial, recent or distant. They were also instructed that the event should be specific e.g. something that happened at a particular place and time and took no longer than a day. If subjects offered a memory that was not specific a standard prompt was given ("Can you think of a specific time, one particular occasion?"). Practice items were given to ensure that the participant understood the instructions and at least one specific memory was elicited before the test was started.



The latency to the first word of each response was timed using a stop-watch. Where prompts were required, the cumulative time to all subsequent responses were recorded. Patients were given 60 seconds to produce a specific memory, and if no such memory was provided within this period, a time of 60 seconds was recorded.

Williams and Broadbent (1986) demonstrated that a distinction between specific and general memories can be reliably made. Thus, a memory was deemed specific if it referred to an occasion that did not span more than one day. Potential scores for each patient ranged from 0 (no first response being specific) to 10 (all first responses being specific).

### 2.6.3 Beck Depression Inventory (BDI – short form) (Beck & Beck, 1972)

The Beck Depression Inventory (BDI – short form) is a clinically derived 13-item self-report inventory which assesses a wide range of affective, cognitive, and motivational symptoms associated with depression. Each item has several response alternatives, varying in intensity, which describe manifestations of individual symptoms. The BDI – short form is correlated highly with the full 21-item scale (reliability coefficients ranging from 0.89 to 0.97) (Beck, Rial, & Rickels, 1974). Few studies have examined the reliability of the short form, but it appears to have internal consistency comparable to that of the long form. Gould (1982) and Beck, Steer and Garbin (1988) reported alphas ranging from 0.78 to 0.90. Stability estimates for the 21-item scale range from 0.78 for a two-week period to 0.62 for a four-month period (Beck et al., 1988).

#### 2.6.4 Social Comparison Rating Scale (SCR, Allan & Gilbert, 1995)

The Social Comparison Rating Scale, based upon a semantic differential methodology (Osgood, Suci, & Tannenbaum, 1957), was used in order to measure the individual's perceived relative social rank, attractiveness and group fit. Participants are asked to make a global social comparison of themselves in relation to others with a series of bipolar constructs rated 1–10.

The 11-item scale measures constructs of rank (inferior-superior), attractiveness (desirable-undesirable), and how a person judges themselves 'to fit in' with or be like others (insider-outsider). The Cronbach alpha for this scale was found to be 0.91 (Allan & Gilbert, 1995) suggesting good internal reliability.

All participants completed this questionnaire for how they generally feel. Those in the Group 1 & 2 were also asked to think about how they felt about themselves in comparison to others in the few minutes prior to a typical episode of self-harm and also just after they had self-harmed.

#### 2.6.5 Other as Shamer Scale (OAS, Goss, Gilbert & Allan, 1995)

This 18-item scale, a modification of the Internalised Shame Scale (ISS, Cook, 1993), was designed to measure external shame or the extent to which others are seen as potentially shaming or derogating of the self. Thus, it examines people's expectations of how others see or judge the self (e.g. I think that other people look down on me). Although the two measures differ conceptually, a significant

correlation was found between the ISS and the OAS ( $r = 0.81$ ) in a non-clinical population. This indicates that where individuals have high levels of internal shame they are more likely to assume that others also view them negatively. The Cronbach alpha for the OAS scale was 0.92 (Goss et al., 1994).

Participants were asked to rate on a five-point scale (never, rarely, sometimes, frequently, almost always) the frequency with which they make certain evaluations. The total OAS score is calculated by summing item scores.

#### 2.6.6 Sensitivity to Social Put-Down Scale (SPD, Gilbert & Miles, 1999)

This 20-item questionnaire was designed to explore how people feel (anxious versus angry) in a potential social put-down experience e.g. being criticized. Participants were asked to rate on two columns (one for anxiety/upset and one for angry/irritated) using a five point Likert scale, how they would feel in each situation. In Gilbert and Miles (2000) study, participants were then asked to indicate the degree to which they blamed themselves and the degree to which they blamed others for the social put-down. Thus a total anxiety, anger, self-blame and an other-blame score were obtained. The Cronbach alpha reliability coefficients for all of the subscales were above 0.9 suggesting good internal reliability of the scale.

As suggested by Gilbert and Miles (2000), the Sensitivity to Social Put-Down Scale was modified in this study to incorporate “anger towards self” and “anger towards others”. Scores were added to provide an overall measure of anxiety, anger directed

towards the self and anger directed towards others, experienced in social put-down situations.

## Results

The results section is divided into four sections. The first is concerned with how representative the self-injury group is of self-harmers within the hospital and the extent to which the groups could be described as sufficiently matched. The second section examines the reliability of the measures before comparing Group 1 (male self-harmers) with Group 3 (male non self-harmers) in terms of 'self-capacities' (self-awareness, ability to regulate affect and maintain meaningful relationships), autobiographical memory, depression, external shame, social rank, and feelings relating to social put-down. The third section examines the associations between over-general memory and 'trait' and 'state' variables. The final section examines past 'shaming' experiences generally associated with self-injury and changes in perceived social rank surrounding the behaviour.

The data analysis was carried out using the SPSS/PC package, version 10. The distribution of variables was examined for normality, kurtosis and skewness. Parametric tests were used on the basis of 1) level of data, 2) normality of distribution and 3) homogeneity of variance. Where the assumptions for parametric tests were not met, non-parametric tests were used. In accordance with standard convention  $p$  is considered significant if  $< 0.05$ . Finally, where priori hypotheses were made, one-tailed tests were applied; otherwise, tests were two-tailed.

### **3.1 Sample characteristics**

#### **3.1.1 Overall representativeness of the groups**

Group differences in terms of demographic variables will now be examined. Firstly, the participants were compared with those individuals who had self-injured in the last five years but did not take part in the study to see if those interviewed were representative of the self-injurious population (Table 1.1).

Applying non-parametric Mann-Whitney tests (two-tailed) on the interval variables, it was found that male participants did not differ significantly from those who were not interviewed in terms of age ( $Z=1.35$ ,  $N_1=21$ ,  $N_2=28$ ,  $p=.18$ ), estimated IQ ( $Z=.53$ ,  $N_1=19$ ,  $N_2=18$ ,  $p=.59$ ), length of time resident within the hospital ( $Z=.17$ ,  $N_1=21$ ,  $N_2=28$ ,  $p=.86$ ) or the number of times they had self-injured over the last five years ( $Z=.39$ ,  $N_1=21$ ,  $N_2=28$ ,  $p=.69$ ). Unfortunately, too few participants prevented the use of chi-squared tests on the categorical data collected. Percentages have therefore been generated (see Tables 1.1 & 1.2) and the range of ethnic origins represented, and level of dependency within the service were not markedly different. Overall, the male participants were representative of the population of males who self-injure within the hospital.

The application of Mann-Whitney tests (two-tailed) indicated that there was no difference between females participants and those who were not interviewed in terms of estimated IQ ( $Z=.87$ ,  $N_1=8$ ,  $N_2=22$ ,  $p=.39$ ) and the number of times they had self-injured over the last five years ( $Z=1.31$ ,  $N_1=13$ ,  $N_2=31$ ,  $p=.19$ ). Examination of the

percentages for categorical data indicated that the groups appeared to have committed index offences within similar categories, had one of three legal categories, a similar ethnic origin, and level of dependency. However, participants were significantly younger ( $Z=2.9$ ,  $N_1=13$ ,  $N_2=31$ ,  $p=.004$ ) and had been resident in the hospital for a significantly shorter period ( $Z=3.1$ ,  $N_1=13$ ,  $N_2=31$ ,  $p=.002$ ) than those who were not interviewed.

**Table 1.1 Demographic and sample characteristics of self-injurers resident in the hospital who did not participate in the study.**

<b>Variable</b>	<b>Male self-injury not interviewed N = 28</b>	<b>Female self-injury not interviewed N = 31</b>
<b>Age:</b>		
Mean (standard deviation)	33.9 (7.0)	36.0 (8.2)
<b>Length of stay in months</b>	84.8 (66.7)	94.3 (69.2)
<b>Index offence</b>		
Homicidal	2 (7.1%)	9 (29.0%)
Other violent	9 (32.1%)	5 (16.1%)
Sexual	6 (21.4%)	0
Criminal damage	4 (14.3%)	10 (32.3%)
Property offences	3 (10.7%)	1 (3.2%)
No index offence	4 (14.3%)	6 (19.4%)
<b>Legal category</b>		
Personality Disorder (PD)	8 (28.6%)	13 (41.9%)
Mental Illness (MI)	10 (35.7%)	9 (29.0%)
PD and MI	9 (32.1%)	9 (29.0%)
MI and Mental Impairment	1 (3.6%)	0
<b>Estimated IQ: Mean (standard deviation)</b>	86.6 (11.6)	91.7 (17.4)
<b>Ethnic origin</b>		
White	26 (92.9%)	27 (87.1%)
Other	2 (7.1%)	4 (12.9%)
<b>Ward dependency</b>		
Low	3 (10.7%)	3 (9.7%)
Medium	15 (53.6%)	18 (58.1%)
High	10 (35.7%)	10 (32.3%)
<b>Freq. self-injury per year: Mean (standard deviation)</b>	3.9 (6.0)	12.2 (12.5)
<b>History of self-injury</b>		
	(1 missing)	
Yes	20 (71.4%)	30 (96.8%)
No	7 (25%)	1 (3.2%)
<b>Childhood sexual abuse</b>		
	(1 missing)	
Yes	13 (46.4%)	21 (67.7%)
No	14 (50.0%)	10 (32.3%)
<b>Childhood physical abuse</b>		
	(1 missing)	
Yes	13 (46.4%)	10 (32.3%)
No	14 (50.0%)	21 (67.7%)
<b>Bullied</b>		
	(1 missing)	
Yes	8 (28.6%)	9 (29.0%)
No	19 (67.9%)	22 (71.0%)
<b>Alcohol abuse</b>		
	(1 missing)	
Yes	12 (42.9%)	22 (71.0%)
No	15 (43.6%)	9 (29.0%)
<b>Drug abuse</b>		
	(1 missing)	
Yes	17 (60.7%)	17 (54.8%)
No	10 (35.7%)	14 (45.2%)



**Table 1.2 Demographic and sample characteristics of group 1 (male self-harmers), group 2 (female self-harmers) and group 3 (male non self-harmers).**

<b>Variable</b>	<b>Male self-injury N = 21</b>	<b>Female self-injury N = 13</b>	<b>Male non injury N = 15</b>
<b>Age:</b>			
Mean (standard deviation)	31.1 (7.0)	28.1 (5.3)	39.9 (8.6)
<b>Length of stay in months</b>	82.2 (52.1)	43.8 (31.9)	96.1 (53.0)
<b>Index offence</b>			
Homicidal	10 (47.6%)	2 (15.4%)	5 (33.3%)
Other violent	4 (19%)	3 (23.1%)	3 (20.0%)
Sexual	4 (19%)	0	5 (33.3%)
Criminal damage	3 (14.3%)	5 (38.5%)	2 (13.3%)
Property offences	0	3 (7.7%)	0
No index offence	0	2 (15.4%)	0
<b>Legal category</b>			
Personality Disorder (PD)	12 (57.1%)	4 (30.8%)	9 (60%)
Mental Illness (MI)	5 (23.8%)	5 (38.5%)	5 (33.3%)
PD and MI	4 (19.0%)	4 (30.8%)	1 (6.7%)
<b>Estimated IQ: Mean (standard deviation)</b>			
	88.0 (10.4)	84.5 (8.1)	86.5 (11.6)
<b>Ethnic origin</b>			
White	20 (95.2%)	12 (92.3%)	14 (93.3%)
Other	1 (4.8%)	1 (7.7%)	1 (6.7%)
<b>Ward dependency</b>			
Low	2 (9.5%)	1 (7.7%)	4 (26.7%)
Medium	13 (61.9%)	6 (46.2%)	10 (66.7%)
High	6 (28.6%)	6 (46.2%)	1 (6.7%)
<b>Freq. self-injury per year:</b>			
Mean (standard deviation)	2.7 (3.9)	18.4 (21.6)	None
<b>History of self-injury</b>			
Yes	16 (76.2%)	13 (100%)	None
No	5 (23.8%)	0	
<b>Childhood sexual abuse</b>			
Yes	10 (47.6%)	10 (76.9%)	6 (40.0%)
No	11 (52.4%)	3 (23.1%)	9 (60.0%)
<b>Childhood physical abuse</b>			
Yes	14 (66.7%)	6 (46.2%)	8 (53.3%)
No	7 (33.3%)	7 (53.85%)	7 (46.7%)
<b>Bullied</b>			
Yes	8 (38.1%)	4 (30.8%)	9 (60.0%)
No	13 (61.9%)	9 (69.2%)	6 (40.0%)
<b>Alcohol abuse</b>			
Yes	14 (66.7%)	11 (84.6%)	7 (46.7%)
No	7 (33.3%)	2 (15.4%)	8 (53.3%)
<b>Drug abuse</b>			
Yes	17 (81.0%)	8 (61.5%)	6 (40.0%)
No	4 (19.0%)	5 (38.5%)	9 (60.0%)

### 3.1.2 The match between groups: Self-harmers and non self-harmers

Group 3 (male non self-harmers) was compared with Group 1 (male self-harmers) in order to examine the extent to which the groups could be considered well matched. The two groups appeared to be relatively well matched with regard to index offence, legal category, and ethnic origin (see Table 1.2). In addition, there was no significant difference in terms of estimated IQ ( $Z=.53$ ,  $N_1=19$ ,  $N_2=18$ ,  $p=.59$ , two-tailed) and length of time resident in the hospital ( $Z=1.12$ ,  $N_1=21$ ,  $N_2=15$ ,  $p=.26$ , two-tailed). However, individuals who self-injured appeared more likely to have been resident on a ward with a higher level of support and significantly younger than those who did not self-injure ( $t(34)=3.37$ ,  $p=.002$ ; two-tailed).

## 3.2 **Self-report measures**

Before examining differences between the groups, the measures of self-capacities, depression, external shame, social rank and feelings relating to social put-down, were examined for their reliability (internal consistency). The findings are reported in Table 2. Alpha coefficients (Cronbach, 1951) for all the measures used ranged from 0.85 to 0.96 indicating high internal consistency.

In order to examine how the current samples scored on the various measures compared with the published norms, Table 3. shows the means and standard deviations of the current sample alongside data extracted from test manuals. As expected, males who self-injured endorsed much higher scores on the IASC than the non-clinical population suggesting greater difficulties in the area of self-capacities,

particularly in relation to affect regulation. However, the male participants (regardless of whether or not they self-injured) reported that they experienced lower levels of external shame, less anxiety/distress following social put-downs, and perceived themselves as higher social rank than the non-clinical populations. This seems surprising given the nature and complexity of the difficulties often experienced by individuals within high security settings and possible reasons will be discussed in section 4.5.3 (p. 113).

**Table 2. Means, standard deviations and values of alpha coefficients of the measures.**

<b>Measure</b>	<b>Total sample mean (N = 49)</b>	<b>Std dev</b>	<b>Alpha</b>
<b>Inventory of Altered Self-Capacities subscales</b>			
interpersonal conflicts	20.76	6.41	0.85
idealization-disillusionment	18.82	6.77	0.87
abandonment concerns	18.76	9.20	0.93
identity impairment	22.06	9.62	0.94
susceptibility to influence	20.08	8.12	0.91
affect dysregulation	23.39	8.63	0.93
tension reduction activities	18.04	7.84	0.85
<b>Beck Depression Inventory (short form)</b>	9.16	7.45	0.89
<b>Social Comparison Rating Scale</b>	63.06	16.95	0.91
<b>Other As Shamer</b>	30.53	17.08	0.96
<b>Social Put-Down Scale</b>			
Anxiety/Distress	57.18	21.69	0.96
Anger towards self	49.86	21.20	0.96
Anger towards others	62.55	20.50	0.94

**Table 3. Means and standard deviations of the measures for the present sample with normative data where available.**

	Norms where available	Male self-injury N = 21	Female self-injury N = 13	Male non injury N = 15
<b>Inventory of Altered Self-Capacities subscales</b>	Normative sample (male and female)			
interpersonal conflict	11.6 (4.3)	22.1 (6.7)	23.3 (5.9)	16.7 (4.5)
idealization-disillusion.	11.4 (4.3)	19.6 (6.8)	22.6 (6.0)	14.4 (4.9)
abandonment concerns	11.3 (4.5)	20.3 (9.5)	23.5 (9.0)	12.5 (5.0)
identity impairments	11.1 (4.5)	23.4 (9.4)	28.1 (8.3)	15.0 (6.3)
susceptibility to influence	10.9 (3.5)	20.3 (7.7)	24.3 (6.3)	16.1 (8.5)
affect dysregulation	11.2 (4.4)	25.0 (7.7)	29.1 (6.8)	16.3 (6.6)
tension reduction activities	10.3 (2.6)	18.7 (5.8)	24.1 (9.2)	11.9 (3.8)
<b>Autobiographical Memory Test</b>	Overdose <sup>1</sup> patients			
Over-general responses:				
positive cues	32%	52%	38%	23%
negative cues	19%	49%	43%	21%
<b>Beck Depression Inventory-short form</b>	Ranges 0-4 none 5-7 mild 8-15 mod. 16+ severe	8.7 (7.2)	14.7 (6.8)	4.9 (5.2)
<b>Social Comparison Rating Scale</b> (greater scores indicate higher social rank)	non-clinical population <sup>2</sup>	64.5 (11.6)	53.1 (25.3)	69.7 (10.0)
<b>Other As Shamer</b> (greater scores indicate higher levels of external shame)	non-clinical population <sup>2</sup>	30.7 (13.6)	39.7 (16.5)	22.3 (18.8)
<b>Social Put-Down Scale</b>	non-clinical population <sup>2</sup>			
Anxiety/Distress	59.8 (14.5)	56.9 (18.9)	71.2 (18.4)	45.5 (22.0)
Anger/irritation	63.0 (14.3)	--	--	--
Anger towards self	--	52.7 (17.8)	65.0 (21.9)	32.7 (21.2)
Anger towards others	--	67.0 (15.2)	69.5 (22.4)	50.3 (21.2)

Standard deviations provided in brackets.

<sup>1</sup> (N=25) Results reported in study carried out by Williams & Broadbent (1986).

<sup>2</sup> (N=155) Results reported in study carried out by Gilbert & Miles (2000)

-- data not available

### 3.2.1 Between group differences

This section reports on between group differences on each of the measures between Group 1 (male self-harmers) and Group 3 (male non self-harmers). As there were no females without a history of self-injury who wished to participate in the study with which to compare those who had self-injured in the last five years, Group 2 was excluded from this part of the analysis.

#### 3.2.1.1 Self-capacities

In order to examine differences in terms of self-capacities (self-awareness, ability to regulate affect and maintain meaningful relationships), scores obtained on the IASC for Group 1 (male self-harmers) were compared with Group 3 (male non self-harmers) (see Table 4.).

**Table 4. Means and standard deviations for the IASC scale in group 1 (male self-harmers) and group 3 (male non self-harmers).**

IASC Sub-totals*	Group 1 <u>Self-harmers<sup>1</sup></u>		Group 3 <u>Non harmers<sup>2</sup></u>		t-value	p 1-tailed
	Mean	S.D.	Mean	S.D.		
Relatedness total	62.04	20.86	43.53	12.54	3.31	.001
Identity total	43.71	15.36	31.07	13.86	2.54	.008
Affect dysregulation	24.95	7.66	16.27	6.63	3.54	.0005

\* The tension reduction activities subscale was removed as questions related to self-injurious behaviour.

<sup>1</sup> N=21, <sup>2</sup> N=15

As predicted, independent t-tests (one-tailed) revealed that male participants who self-injured scored significantly higher on all the IASC subscales than the comparison group. Thus, they reported experiencing greater difficulties in the areas of relatedness e.g. the ability to form and maintain meaningful relationships ( $t(34)=3.31, p=.001$ ), maintaining a sense of personal identity and self awareness ( $t(34)=2.54, p=.008$ ), and finally, affect regulation e.g. controlling and tolerating strong negative affect ( $t(34)=3.54, p<.001$ ).

### 3.2.1.2 Autobiographical memory

In order to examine for differences in terms of autobiographical memory, scores obtained on the AMT for Group 1 (male self-harmers) were compared with Group 3 (male non self-harmers) using independent t-tests (one-tailed) (see Table 5.)

**Table 5. Means and standard deviations for AMT in group 1 (male self-harmers) and group 3 (males non self-harmers).**

AMT Number of specific first responses	Group 1 <u>Self-harmers<sup>1</sup></u>		Group 3 <u>Non harmers<sup>2</sup></u>		t-value	p 1-tailed
	Mean	S.D.	Mean	S.D.		
Positive cues	2.38	1.69	3.87	1.19	-2.93	.003
Negative cues	2.57	1.63	3.93	1.16	-2.93	.003
Total	4.95	2.41	7.80	2.24	-3.59	.0005

<sup>1</sup> N=21, <sup>2</sup> N=15

In support of previous studies, it was found that males who self-injured revealed significantly more memories which were over-general in response to the ten cue words given ( $t(34)=3.59$ ,  $p<.001$ ), regardless of whether the cue word was positive ( $t(34)=2.93$ ,  $p=.003$ ) or negative ( $t(34)=2.93$ ,  $p=.003$ ) than those who did not self-injure.

As the data relating to episodes of self-injurious behavior in the male sample was skewed towards fewer episodes of self-injury, the Spearman Rank Coefficient ( $r$ ) was used to determine the correlation (two-tailed) between the frequency of self-injury and memory specificity. Within Group 1 no relationship between the number of episodes of self-injurious behavior and over-general memory ( $r=-.075$ ,  $p=.746$ ) was found. Thus, males who showed greatest over-general memory did not engage in lower levels of self-injury.

### 3.2.1.3 General affect

As the data relating to depression scores in Group 3 (male non self-harmers) did not meet the assumption for normal distribution, a Mann Whitney test was used to examine differences in depression between males who self-injured and those who did not. Although it was found that males in Group 1 reported higher levels of depression on the Beck Depression Inventory-short form than those in Group 3, this did not quite reach statistical significance ( $Z=-1.63$ ,  $N_1=21$ ,  $N_2=15$ ,  $p=.052$ , one-tailed). While males who self-injured also reported higher levels of external shame on the Other As Shamer questionnaire than those who did not self-injure, this did not reach statistical significance ( $t(34)=1.56$ ,  $p=.065$ ; one-tailed).



### 3.2.1.4 Social comparison

It was predicted that individuals who self-injured would generally perceive themselves as lower social rank than those who did not self-injure. While Group 1 did report that they perceived themselves as lower social rank, this did not reach the conventional 5% level of statistical significance ( $t(34)=1.42$ ,  $p=.08$ ; one-tailed). Whether there were perceived changes in social rank associated with the act of self-injury itself is examined in section 3.4.2 (p. 78).

### 3.2.1.5 Sensitivity to social put-down

While there were no significant differences between Group 1 & Group 3 in relation to perceived general social rank, the two groups were compared using independent t-tests (one-tailed) to see if individuals in Group 1 were reporting greater sensitivity to social put-downs and criticism etc. (Table 6).

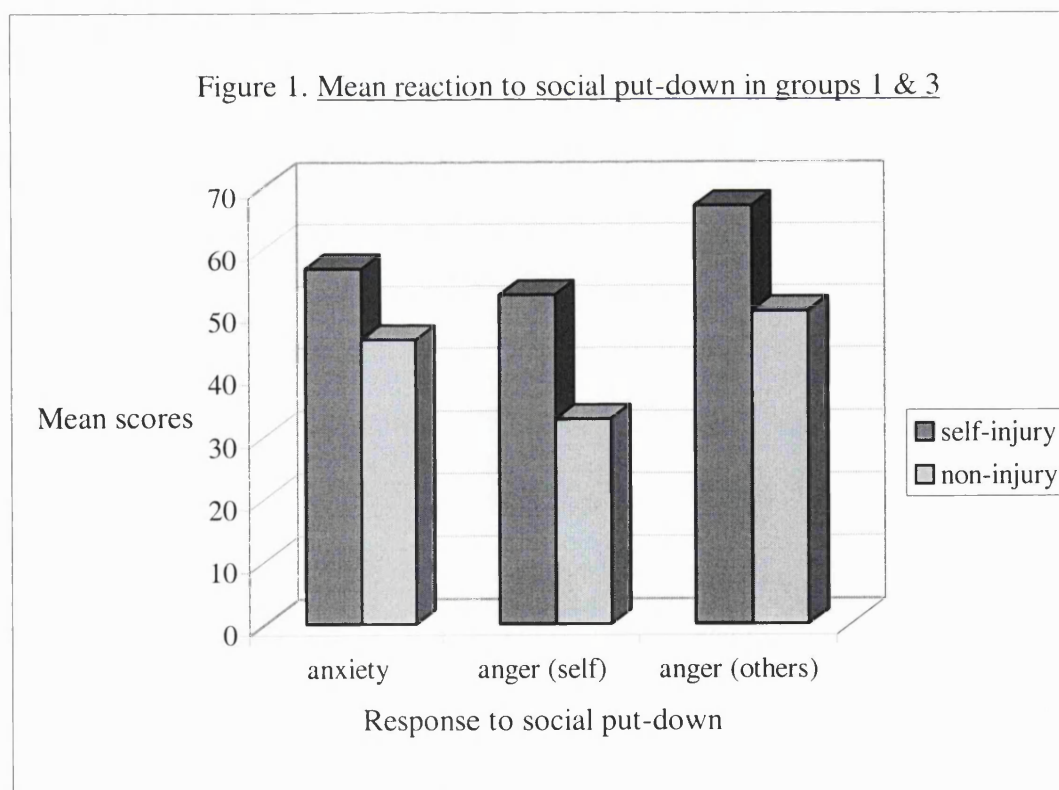
**Table 6. Means and standard deviations for the Sensitivity to Social Put-Down scale in group 1 (male self-harmers) and group 3 (males non self-harmers).**

Social Put-Down Scale	Group 1 <u>Self-harmers</u> <sup>1</sup>		Group 3 <u>Non harmers</u> <sup>2</sup>		t-value	p 1-tailed
	Mean	S.D.	Mean	S.D.		
Anxiety/distress	56.86	18.92	45.53	22.04	1.65	.054
Anger towards self	52.71	17.84	32.73	11.68	3.79	.005
Anger towards others	66.95	15.18	50.33	21.16	2.60	.008

<sup>1</sup> N=21, <sup>2</sup> N=15

Table 6. shows that Group 1 reported experiencing more anxiety, although not statistically significant  $t(34)=1.65, p=.054$ ), significantly more anger towards themselves ( $t(34)=3.79, p=.005$ ) and also significantly more anger towards others ( $t(34)=2.6, p=.008$ ) than those individuals in Group 3 in response to social put-downs.

While Group 1 reported a more extreme reaction to criticism, contrary to prediction, both groups endorsed a similar pattern of emotional responses on this measure. In both groups the men reported that the most frequent reaction to social put-down was to experience anger towards others, followed by anxiety/distress and then anger towards themselves (see Figure 1).



3.3 Over-general memory and state/trait variables

This section examines whether over-general memory in males (Groups 1 & 3, N=36) is associated with either `trait' or `state' variables. As the data for relatedness and depression scores in the male sample did not meet the assumption for normal distribution Spearman Rank Coefficients (r) were used to examine the relationship between the scores obtained on the AMT and the BDI, OAS and IASC (see Table 7).

**Table 7. Relationship between over-general memory and measures of `state' and `trait' characteristics in the male sample.**

AMT	State variables		Trait variables – IASC		
	BDI	OAS	Relatedness Total	Identity Total	Affect Dysregulation
Total number of specific first responses	r = -.214 p = .210	r = -.156 p = .362	r = -.442* p = .01	r = -.442** p = .007	r = -.561** p = .000

\* Correlation is significant at the 0.05 level (2-tailed).  
 \*\* Correlation is significant at the 0.01 level (2-tailed).

Spearman-Rank correlations (two-tailed) indicated that there was no association between over-general memory and depression (r=-.214, p=.21) or external shame (r=-.156, p=.362). However, over-general memory was associated with greater difficulties in relatedness (r=-.442, p=.01) and in particular, identity problems (r=-.442, p=.007) and affect dysregulation (r=-.561, p<.001). This suggests that within the male population, difficulties in retrieving specific memories appears to be more related to `trait' personality factors as measured by questionnaire than to more transient mood related factors.

Next, the female group (N=13) was examined to see whether over-general memory was associated with either 'trait' or 'state' variables. As affect regulation scores in the female sample did not meet the assumption for normal distribution Spearman Rank Coefficients (r) were used to examine the relationship between the scores obtained on the AMT and the BDI, OAS and IASC (see Table 8).

**Table 8. Relationship between over-general memory and measures of 'state' and 'trait' characteristics in the female sample**

AMT	State variables		Trait variables – IASC		
	BDI	OAS	Relatedness Total	Identity Total	Affect Dysregulation
Total number of specific first responses	r = .136 p = .657	r = .300 p = .320	r = .379 p = .201	r = .446 p = .126	r = .490 p = .089

Table 8. shows that as in the male group, there were no associations between over-general memory and depression (r=.135, p=.659) or external shame (r=.300, p=.320). There were no relationships between over-general memory and difficulties in relatedness (r=.379, p=.201), identity problems (r=.446, p=.126) or difficulties in affect regulation (r=.49, p=.089).

As the data relating to episodes of self-injurious behaviour in the female sample was skewed towards fewer episodes of self-injury, the Spearman Rank Coefficient (r) was used to determine the correlation (two-tailed) between the frequency of self-injury and memory specificity. A positive relationship was found between the number of episodes of self-injurious behavior and the number of specific first

responses on the AMT ( $r=.738$ ,  $p=.004$ ). In contrast to the male sample (see p. 75), females who showed greatest over-general recall had the least episodes of self-injury.

### 3.4 Self-injury, shaming experiences and changes in social rank

The final section examines whether past shaming experiences are associated with self-injury. In addition, changes in perceived social rank surrounding the self-injurious behaviour will be explored.

#### 3.4.1 Self-injury and its relationship with past 'shaming' experiences

It was predicted that individuals who self-injure will be more likely to have more 'shaming' experiences during childhood than those individuals who have never engaged in self-injurious behaviour. Overall, there was a large percentage of early abuse reported amongst participants. There were particularly high levels of childhood sexual abuse amongst women who self-injured and high levels of physical abuse amongst males who self-injured (Table 1.2, p. 68). However, in the male sample (Groups 1 & 3), chi-squared tests indicated there was no relationship between self-injurious behaviour and childhood sexual abuse ( $X^2(1)=.288$ ,  $p=.591$ ); physical abuse ( $X^2(1)=.039$ ,  $p=.843$ ); and experiences of being bullied ( $X^2(1)=3.395$ ,  $p=.065$ ). There was no relationship between self-injurious behaviour and history of alcohol abuse ( $X^2(1)=.258$ ,  $p=.612$ ). However, males who self-injured were more likely to have a history of drug abuse than those who do not self-injure ( $X^2(1)=4.687$ ,  $p=.03$ ).

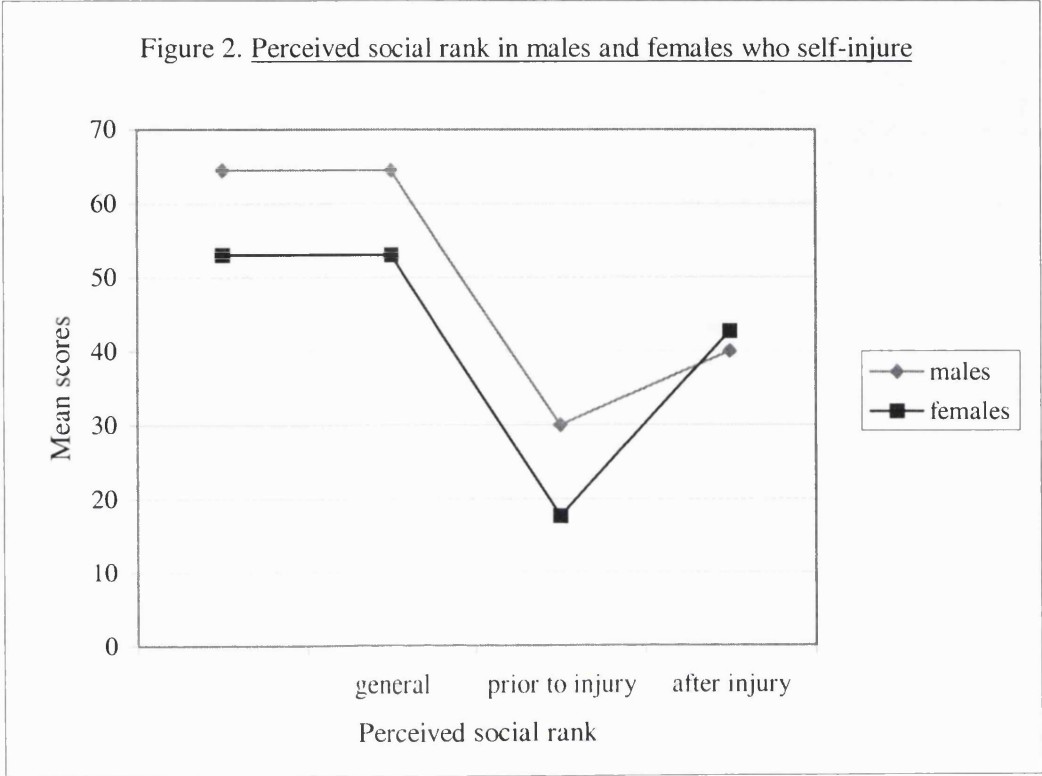
### 3.4.2 Changes in social rank related to self-injury

Participants in Group 1 & Group 2 were asked to think about how they felt about themselves in comparison to others in the few minutes prior to a typical episode of self-harm and also just after they had self-harmed.

As predicted, in Group 1 (male self-harmers) there was a significant effect of social rank ( $F(2,38)=22.59$ ,  $p<.001$ ). Paired samples t-tests were carried out in order to examine each individual's changes in perception generally, before and after self-injury. It was found that males experienced a significant fall in their perceived social rank ( $t(19)=6.255$ ,  $p<.001$ ; one-tailed) just prior to self-injurious behaviour. Compared to how they saw themselves just prior to self-injuring, while male's perception of their social rank increased following the act of self-injury, this was not statistically significant ( $t(19)=1.365$ ,  $p=.188$ ; one-tailed). Thus, in the short term, the men's perception of their social rank did not return to 'normal' levels relative to their own base-rate following the act of self-injury (see Figure 2).

Group 2 (females self-harmers) also endorsed a significant effect of social rank ( $F(2,24)=9.423$ ,  $p=.001$ ). Paired samples t-tests revealed that females also experienced a significant fall in their perceived social rank ( $t(12)=5.939$ ,  $p<.001$ ; one-tailed) just prior to self-injurious behaviour. Compared to how they saw themselves just prior to self-injuring, the women's perception of their social rank increased significantly following the act of self-injury ( $t(12)=3.131$ ,  $p=.0045$ ; one-tailed). Thus, immediately following the act of self-injury, female's perception of

social rank returns to within the 'normal' range relative to their own base-rate (see Figure 2).



## Discussion

### **4.1 Summary of the findings**

In this study, male participants who self-harmed reported experiencing greater difficulties in the areas of relatedness, maintaining a sense of personal identity and self awareness, and affect regulation; and produced significantly more memories which were over-general in response to the cue words given. Trends indicated that they endorsed higher levels of depression and higher levels of external shame than those who had never engaged in self-injury.

There was no relationship between self-injurious behaviour and childhood sexual abuse, physical abuse, and experiences of being bullied amongst male mentally disordered offenders. However, those who self-injured tended to have histories of alcohol abuse (although this was not statistically significant) and were significantly more likely to have a history of drug abuse than those who did not self-injure.

In the male sample (Group 1 & 3 combined) there was no relationship between over-general memory and 'state' variables (e.g. depression and shame) as measured by questionnaire. However over-general memory was strongly associated with greater difficulties in relatedness, identity problems and affect dysregulation. In contrast, in the female population, there was no relationship between either 'trait' or 'state' variables and over-general memory.



In relation to 'general' perception of social rank there was no significant difference between males who self-injured and those who did not. However, as predicted, both men and women reported experiencing a dramatic fall in their perceived social rank just prior to self-injurious behaviour. Immediately following the act of self-injury, the female's perception of social rank returned to within the 'normal' range relative to their own base-rate. While men also reported that their perception of social rank increased following the act of self-injury, it appears to take longer before there is a return to 'normal' levels relative to their own base-rate.

Finally, it was found that in response to social put-downs, men who self-injured reported experiencing more anxiety (although this was not statistically significant), and significantly more anger directed towards themselves and towards others than those individuals who did not self-injure. While the former reported a more extreme reaction to criticism, contrary to prediction, both groups endorsed a similar pattern of emotional responses on this measure. The most frequent reaction to social put-down in men was to experience anger towards others, followed by anxiety/distress and then anger towards themselves.

Given that the number of participants was small, the results are interpreted with caution in the discussion below. Limitations of the study are discussed in detail later (see p 104). Nonetheless, the reader might keep in mind that power limitations may be relevant to evaluate trends or 'nearly' significant findings presented below.

## 4.2 Discussion of the results

### (1) Self-injury and its relationship with past 'shaming' experiences.

The clinical and research literature suggests that there are a number of phenomena or conditions which may predispose an individual to self-harming behaviours. Factors reported include the loss of a parent, alcoholism in the family, witnessing family violence, peer conflict, childhood abuse and impulse control disorders (Walsh & Rosen, 1988). However, recent research has indicated that childhood sexual abuse may be the most powerful etiologic factor associated with the development of self-harming behaviours (Bagley & Ramsey, 1985; Briere, 1984; Briere, 1998; Briere & Gil, 1998; Briere & Runtz, 1986; Briere & Zaidi, 1989; Darche, 1990; Sedney & Brooks, 1984; Shapiro, 1987; Walsh & Rosen, 1988; Zlotnick, Shea, Pearlstein, Simpson, Costello, & Begin, 1996). In support of this, Bryer and colleagues (1987) found that individuals with suicidal ideation or self-harming behaviours were three times more likely to have been abused as children than patients without such behaviours. From a psychodynamic perspective, Stone (1980) postulates that self-injury is regarded by the injurer not only as self-punishment, but also by proxy, punishing the initial perpetrator of the abuse. However, studies have examined predominantly female populations. The few studies which have investigated the relationship amongst males have provided mixed results. While, some studies reported greater self-injury amongst a non-clinical population of male childhood sexual abuse survivors (Boudewyn & Liem, 1995; Briere, Evans, Runtz, & Wall, 1988) and amongst males in a medium security setting (White, Leggett, & Beech, 1999), another study failed to find a relationship between childhood sexual and

physical abuse and self-mutilation amongst male participants with a diagnosis of BPD (Zweig-Frank, Paris, & Guzder, 1994).

The present study found that within the male sample there was no relationship between self-injurious behaviour and experiences of childhood sexual and physical abuse, or being bullied, documented in their records. It is important to note that characteristically amongst individuals in high security settings, there were high levels of disruption and early abuse overall. Sheldrick (1991) also notes that abuse typically occurs in the context of multiple problems and that a number of variables may occur in tandem. Boudewyn and Liem (1995) found that the difference between abused and non-abused participants with regard to acts of self-harm was more marked among females than males. Therefore the relationship between self-injury and childhood 'shaming' experiences may not be detectable with a small sample of males with multiple aetiological factors in their personal histories predisposing them to ill-health. Finally, it should be noted that approximately a quarter of the male participants had no record of self-injurious behaviour prior to their admission to hospital. It may be that for some males at least, self-injury could be understood as an 'emotional reaction towards confinement' (Claghorn & Beto, 1967) rather than a direct consequence of early abusive experiences. In support of this, Tantam and Whittaker (1992) propose that the combination of being trapped and feeling neglected seems particularly likely to lead to self-wounding, whether carried out by a solitary prisoner or by an adolescent trapped in a disturbed family.

(2) Self-injury and its relationship with drug and alcohol abuse.

Several authors have suggested that substance abuse is a major predisposing factor in self-harming behaviours (Favazza & Conterio, 1989; Favazza & Rosenthal, 1993; Maden, Chamberlain, & Gunn, 2000; Pattison & Kahan, 1983; Wilkins & Coid, 1991; Williams & Wilkins, 1994). The present study found that within the male sample, those who self-injured were more likely to have a documented history of alcohol abuse (although this was not statistically significant) and were significantly more likely to have a history of drug abuse than those who did not self-injure. However, it is unclear whether substance abuse is actually a predisposing factor in self-harm. It could be argued that poor impulse control, suggested to underlie self-injury (Pattison & Kahn, 1983; Lacy & Evans, 1986), may also lead to excessive use of substances. Nevertheless, substance abuse has been found to distract, soothe, numb, or otherwise reduce painful emotional states amongst individuals who experience difficulties in regulating extreme emotional states (Grilo et al., 1997). In this context, Trull and colleagues (2000) suggest that substance abuse is commonly used to provide an anaesthetizing or state-altering function among individuals with impaired self-capacities. Whether individuals who self-harm are also more likely to experience greater difficulties in this area is considered next.

(3) Self-injury and self-capacities.

According to the theories of Kohurt (1977), McCann and Pearlman (1990) and Briere (1997) successful functioning is dependent upon the extent to which an individual is able to maintain a sense of personal identity and self awareness; control and tolerate strong, negative affect and finally, form and maintain meaningful relationships. Studies indicate that experiencing difficulties in these particular areas are correlated with reports of having been maltreated as a child (Herman et al., 1989) and with suicidal ideation and self-harming behaviours (Bryer et al., 1987). Discriminant functional analysis indicated that all the IASC scale scores were substantially higher for respondents actively considering suicide compared to non-suicidal individuals in the normative sample (Briere, 1998). However, as borderline symptoms overlap substantially with the areas measured by the IASC, and suicidal and self-injurious behaviour are described specifically in the DSM-IV criteria for BPD, it is unsurprising that the IASC predicts suicidality. Yet, studies have also indicated that individuals who self-injure report significantly greater difficulties in the areas of self-capacities (as measured by the IASC), than those who do not self-injure (Briere & Gil, 1998). In support of this finding, these psychological factors were also found to be highly relevant in the current sample of mentally disordered offenders. Males who self-injured reported experiencing greater difficulties in the areas of relatedness, and in particular, in maintaining a sense of personal identity and affect regulation than those who did not self-injure.

With regards to the effects of age, Briere (1998) found that younger participants (under 55 years) scored significantly higher than older participants (55 years and

older) on the IASC. However, age difference effects in the normative sample were small. The amount of variance accounted for by age was only between 0.0% and 1.8% in any given IASC scale. Therefore, it is unlikely that the differences found in the present study were due to the small difference in age between the two groups.

Briere's model (Briere, 1998) suggests that in general high scores on the relatedness subscales indicates a tendency to be involved in emotionally upsetting relationships often leading to considerable interpersonal anger or irritability. Individuals with difficulties in this area may be inclined to idealize and devalue others, experience fears of abandonment and/or respond to perceived losses with angry or even desperate behaviour. Raised scores on the identity subscales indicate difficulties in maintaining a coherent sense of identity and self-awareness, and a tendency to experience difficulties in self-assertion or in meeting interpersonal needs. In this context, self-injuries may be seen as attempts to identify and assert both physical and self-boundaries (Woods, 1988). Although questions did not relate directly to sexual identity, difficulties in this area may possibly have contributed to high scores amongst self-harmers on this subscale. In a review of 110 cases of male genital mutilation, it was hypothesised that feelings of guilt associated with sexual conflicts were the most important factor in the act of psychotic self-mutilation, and that disturbance of sexual identity was the largest precipitating factor in the act of non-psychotic self-mutilators (Karger, 1996). In the present study, 2 (9.5%) of the male participants and a further 5 males who did not participate (4 were too unwell and 1 declined) engaged in genital self-mutilation.

Finally, high scores on the affect dysregulation subscale are proposed to indicate problems in inhibiting the expression of strong emotions and/or a relative inability to move out of dysphoric states without demonstrating either externalising behaviours (e.g. aggression, self-injury etc.) or avoidance (e.g. dissociation, substance abuse etc.). In fact, the most frequently cited reason for self-injury in the literature is affect regulation. Self-injury has been reported to reduce feelings of anxiety, loneliness, emptiness, guilt, dissociation, and the impacts of intrusive phenomena such as flashbacks or obsessive ruminations (Brierre, 1996; Favazza & Conterio, 1989; Wilkins & Coid, 1991; Walsh & Rosen, 1988).

(4) Self-injury and autobiographical memory.

Several studies have found that patients who are admitted to hospital following deliberate self-poisoning are poorer than matched controls at recalling specific autobiographical memories when presented with the Autobiographical Memory Test (AMT) (Evans et al., 1992; Williams & Broadbent, 1986; Williams & Dritschel, 1998; Williams, Ellis, Tyers, Healy, Rose, & MacLeod, 1996). In explanation, Williams (1997) proposes that suicidal and depressed patients experience 'mnemonic interlock' in the intermediate stage of memory retrieval. It is suggested that such individuals fail to adequately utilise the general descriptions they generate to help them to search for and retrieve more detailed information found in the 'lower' layers of the memory database. According to his theory this phenomenon may act as a way of defending against the pain of remembering specific traumatic memories (Williams, 1996).

While over-generality has been examined for its association with a wide range of emotional difficulties, it has not previously been examined for its association with self-injurious behaviour. In the present study it was found that males who self-injured produced significantly more memories which were over-general in response to the cue words given, regardless of whether the cue was positive or negative, than those who did not self-injure. As there was no significant difference between the groups in terms of estimated IQ, poorer performance was unlikely to have been due to lower general intelligence.

It has been suggested that over-general memory may possibly underpin the problem-solving deficit (Evans et al., 1992; Sidley et al., 1997) found in individuals who engage in parasuicidal behaviours (Goodstein, 1982; Scotte & Clum, 1987; Rotherham-Borus et al., 1990; Williams, 1986). More specifically, Evans and colleagues (1992) propose that over-general retrieval makes it difficult to generate effective solutions to real life problems, thereby increasing hopelessness and risk of parasuicide. While Startup (2001) notes that levels of hopelessness reported by parasuicidal individuals did not correlate significantly with either specificity of recall or the effectiveness of the solutions, it could be argued that this may be due to individual differences within the parasuicidal population. If individuals who self-injure are seeking a means to survive (Babiker & Arnold, 1997), whereas individuals who attempt suicide wish to 'destroy' themselves (MacLeod et al., 1992), increased levels of hopelessness would not necessarily be expected amongst the former group.



(5) Over-general memory and state/ trait variables.

Studies have indicated that people with a primary diagnosis of depression, even if not suicidal, are much more likely to respond with over-general memories, especially in response to positive cue words (Kuyken & Dalgliesh, 1995; Williams & Scott, 1988; Moore et al., 1988; Puffet et al., 1991; Brittlebank et al., 1993; Goddard et al., 1996). However, the correlation between specificity of autobiographical memory and depressed mood (as measured by the Beck Depression Inventory) has not been found to be significant in all studies (e.g. Kuyken & Brewin, 1995; Sidley et al., 1997; Williams & Dritschel, 1988; Brittlebank et al., 1993; Jones et al., 1999). In addition, findings that individuals with BPD have been shown to have over-general memories compared to matched controls has led to the suggestion that over-generality may be related to a lifelong cognitive trait (Jones et al., 1999; Startup et al., 2001).

The present study found that there was no significant relationship between over-general memory and mood related factors (e.g. depression and external shame) as measured by questionnaire, amongst either the male or the female participants. However, there was a strong relationship between over-general memory and 'trait' personality factors as measured by the IASC, amongst the male sample. Thus, over-general memory was correlated with greater difficulties in relatedness and, in particular, identity problems and affect dysregulation. This finding is consistent with the current research literature and also with clinical observations. When individuals with the types of psychological difficulties mentioned previously (p. 88) are asked to describe past events during therapy they frequently respond with global self-referent statements such as 'I've always been unhappy'. In turn, difficulties in recall may

hinder their ability to generate effective solutions to their current problems. Resulting low self-efficacy, high dependency, and emotional reliance on others are commonly found in individuals with a diagnosis of BPD (Perry & Cooper, 1985). In this context, self-harming behaviours are not only experienced as effective in relieving tension, but also in eliciting help from the environment (Linehan, 1993).

While it is surprising that the current study did not find a relationship between impaired self-capacities and specificity of recall amongst females who self-injure, it may simply be that there were too few female participants to detect a significant correlation. However, unlike the male sample, amongst the female sample there was a strong relationship between specificity of memory recall and frequency of self-injury. The female participants who displayed greatest over-general recall had the fewest episodes of self-injury in the last 5 years. Startup and colleagues (2001) also found that within a predominantly female sample of individuals with a diagnosis of BPD, those who showed greatest over-general recall reported fewest parasuicidal acts during the previous 4 months. Both of these studies suggest that for some individuals at least, over-general memory may have an adaptive function in helping to protect individuals from the build-up of the kinds of thoughts, memories, and feelings which may lead to self-harm. This conclusion seems consistent with anecdotal evidence for the development of over-general memory (Williams, 1996), and may account for the maintenance of over-general recall despite its detrimental effects on problem-solving abilities.

(6) Self-injury, depression and external shame.

The presence of depression has been linked with an increased propensity to engage in self-injurious behaviour in male prisoners (Bonner & Rich 1990; Favazza, 1987; Shea, 1993). Similarly, self-injury has also been associated with excessive feelings of shame, low self-esteem, guilt and self-blame (Wise, 1990; Burstow, 1992). In the present study, it was found that male participants who self-injured endorsed higher levels of depression on the Beck Depression Inventory-short form, and higher levels of external shame on the Other As Shamer questionnaire, than those who did not self injure. However, neither of these findings reached the conventional 5% level of statistical significance. Given that males who self-injured endorsed such high scores on affect dysregulation on the IASC questionnaire, it is surprising that the difference between the two groups was not larger. Possible reasons for this will be discussed in section 4.5.3 (p. 113).

While these non-significant findings may be due to the small sample sizes, it may also be that there were no significant differences between the two groups in terms of levels of reported shame and depression. Many authors suggest that depression itself is not a sufficient cause for self-injurious behaviour, rather that it is a contributory cause, which, in combination with other factors such as a negative life event or poor problem solving, increases the probability that a self-injurious act will occur (Chiles, Miller, & Cox, 1980; Livingston, 1997). In relation to experiences of shame, it may be that some individuals who self-injure are shame-prone (i.e. sensitive to experiencing shame in certain situations) but do not continuously experience particularly high levels of generalized or global shame.

Briere and Gil (1998) found that within a predominantly female sample from the general population, although self-injury ameliorated distress (e.g. by reducing anger at self and others, fear, emptiness, hurt, loneliness and sadness), it also increased the individuals' sense of shame. They suggest that this may be by virtue of the social unacceptability of self-injury. Whether or not males in high security appear to be ashamed of their self-injurious behaviour will be discussed next.

(7) Self-injury and perceived social rank.

Throughout history a vast array of cultural practices, attitudes and beliefs have led to the use of various forms of self-mutilation. In addition, the functional uses of self-injury in providing short-term relief from overwhelming distress (Winchel & Stanley, 1991), maintaining a sense of control for the individual (Babiker & Arnold, 1997), and containing the distress and pathology of the 'system' within which it occurs (Aldridge, 1988), are well recognised. However, Babiker and Arnold, (1997) propose that 'self-injury has become pathologised as a result of arbitrary and discriminatory distinctions between 'normal' and 'dysfunctional' features of human behaviour' (p. 21). Within our culture the pursuit of a healthy body has become morally good and deliberate self-injury is often considered 'sick' (Tantam & Whittaker, 1992), 'socially unacceptable' (Walsh & Rosen, 1988) or 'deviant' (Favazza, 1987). Researchers have noted that individuals often injure themselves in areas that are easily covered by clothing and they may explain wounds that are visible as accidental rather than intentional (Briere & Gil, 1998). In explanation, Gibert (1992) proposes that humans have an innate need to be seen as attractive to others. According to his theory, receiving signals that a particular behaviour is

considered unattractive by significant others can often lead to a fall in an individual's perception of their resource-holding potential (RHP e.g. relative strength, power and aggressiveness), or social attention holding power (SHAP e.g. the ability to direct favourable attention). Similarly, as humans have an evolved need for kinship and a sense of belonging (Bailey et al., 1992), engaging in behaviours that are disapproved of may lead to a fear of rejection, marginalisation and/or even alienation (Allan & Gilbert, 1995).

However, contrary to prediction, it was found that there was no significant difference between reports of 'general' perception of social rank in males who self-injured and those who never engaged such behaviours. While individuals who self-injured endorsed slightly higher general levels of external shame, observations suggested that self-injury itself did not appear to carry the same stigma as it does amongst other groups of individuals. In support of this, during the interviewing process, most of the male participants were actually keen to display their wounds (even though this was not requested) and in some cases wounds were clearly visible e.g. cuts made to the forearms, face or neck. However, perhaps this was a biased sample. The men who declined to participate (N=12) may have viewed their behaviour as shameful and therefore did not wish to be questioned about it.

However, over the last 40 years, several authors have noted that amongst adolescents, self-injury occurs in clusters throughout the year, suggesting that individuals may observe that self-mutilation is rewarded in some way, and then imitate the behaviour (Crabtree & Grossman, 1974; Mathews, 1968; Offer & Barglow, 1960; Walsh & Rosen, 1985). In fact, Mathews (1968) emphasized the

role of 'high status instigators', and suggested that peer group competition played a role in contributing to 'epidemics' of self-injurious behaviour. While contagion has also been reported in male prison settings (Favazza, 1992), no research has been carried out in high security psychiatric settings. Nevertheless, observations from professionals within the hospital suggest that individuals seem to respond to particular 'fashions' in methods of self-injury. In support of this, one male participant who reported that he had never self-injured before commented: 'I saw other people swallowing batteries and I did it just to see if it would make me feel better'. Alternatively, for some, self-injury may be a way of proving their bravado, strength or endurance. Scars may be used to create a sense of identity (Raine, 1982) and may communicate to others that they have suffered, yet they are 'tough' and can tolerate and survive painful experiences. This indicates that although individual experience and circumstances may underlie the distress which gives rise to self-injury, at the very least, the social context may play a part in maintaining such strategies (Babiker & Arnold, 1997).

Finally, it should also be remembered that self-injury within this setting is not unusual. In terms of prevalence, the majority of the female patients and approximately one fifth of the male population had engaged in at least one episode in the last five years. Podvoll (1969) postulates that within a hospital setting, patients who self-mutilate rapidly assume an 'identity' which is equated with their symptomatic acts. In addition, such behaviour may also be a means of demonstrating belonging and solidarity with this group of individuals, as well as resistance to those in authority (Babiker & Arnold, 1997). Forming an identity as part of a group may

be particularly important for those individuals who report difficulties in maintaining a stable sense of personal identity (see p. 88).

8) Perceived changes in social rank associated with the act of self-injury.

While there appeared to be no reported difference in general perceptions of social rank, individuals who self-injured reported that they experience a dramatic fall in their perceived social rank just prior to self-injurious behaviour. According to social rank theory, a perceived loss of SAHP or RHP may lead to the activation of the 'involuntary subordinate strategy' (Price et al., 1994, p. 309). In relation to the development of depression, Price and colleagues (1994) suggest that this 'involuntary subordinate strategy' has the following functions: (1) to promote a range of defensive strategies including shame, envy, depression, social anxiety, resentment and self-criticism which alerts the individual to actual or possible losses of social status; (2) to inhibit aggressive behaviour towards rivals by creating a subjective sense of incapacity, and (3) to encourage the display of signals of 'no challenge' to potentially attacking others to indicate that further signs of rejection are unnecessary.

Raleigh and colleagues (1984) note that physiological changes associated with the experience of strong emotions are often the consequence of rank changes not the cause. This suggests that there may be a 'cost-benefit' analysis preceding social contests which determines whether or not an individual will challenge others (Gilbert et al., 1995). Withdrawing from the situation and engaging in self-injury may be an effective means of reducing these overwhelming emotions (Briere & Gil, 1998) and

regaining a sense of autonomy and control (Babiker & Arnold, 1997). It could also be argued that self-injury may function as a form of 'damage limitation', a strategy frequently used when people feel inferior (Wood, Giordano-Beech, Taylor, Michela, & Gaus, 1994). Choosing the option of 'hurting' themselves, where the outcome is relatively predictable and controllable, may be preferable to verbally (or even physically) challenging those perceived as 'stronger', which could result in being attacked, humiliated or even excluded. In support of this, Favazza (1987) describes self-mutilation as a safer outlet than expressing anger towards others who may retaliate.

The current study found that immediately following the act of self-injury, perception of social rank returned to within the 'normal' range relative to their own base-rate in female participants. While perception of social rank also increased following the act of self-injury, the men reported that it takes longer before this returns to 'normal' levels relative to their own base-rate. Reported 'repair' of perceived social status, particularly amongst females following self-injury, may be the result of anticipating help from others, initially in the form of medical attention. In addition, it could be hypothesised for some (but not all), that the idea of increased staff support may lead individuals to feel cared for, listened to, and/or more important. Several participants also commented that they felt more talented and/or powerful after finding a means to self-harm whilst under observation and subject to frequent searches. Perhaps females experience a greater increase in social rank following self-injury than males as in general they are socialized to seek help for interpersonal problems (Hoffman, 1972). In contrast, male socialization promotes instrumental, assertive and competitive qualities (Bern, 1976). In support of this, Hobbs and Dear (2000) found



that male prisoners would rarely approach prison officers for emotional support. While high security psychiatric settings are more directed towards providing a therapeutic environment, some men's reluctance to elicit and/or receive care may be related to experiences of shame surrounding their emotional needs (Buunk & Hoorens, 1992; Fisher, Nadler & Whitcher-Alagna, 1982; Gilbert, 1992; Osherson & Krugman, 1990). According to social rank theory, for some individuals even revealing that they are in distress can be seen as inviting unfavourable social comparison from others and places them in a lower status, one-down or dependent position (Gilbert et al., 1995).

It has been suggested that many different forms of psychopathology can be understood as variations in the strategic management of SAHP, status and social connectedness (Gilbert, 1997a). It is possible that whilst mediated by the individual's view of self-harming behaviours e.g. whether or not it is seen as 'shameful', and their desire to elicit support, self-injury may actually protect some individual's against further losses in SAHP or RHP.

(9) Self-injury and sensitivity to social put-downs.

Many stressful events can be conceptualized as losses of social rank (Zuroff, Moskowitz, & Côté, 1999). For example, perceived abandonment, losing social contests and being the recipient of social put-downs can activate the 'involuntary subordinate strategy' leading to social anxiety, shame, humiliation, and/or depression (Gilbert et al., 1995). Criticism and social put-down can lead to feelings of shame especially if the criticized person believes that the criticism is valid and indicates that

an undesirable or unattractive aspect of the self has been observed by others (Gilbert, 1998; Tangney, 1995).

Blackburn and colleagues (1990) note that problems of submissiveness, fear of competitiveness, poor self-esteem and inappropriately expressed anger are common amongst mentally disordered offenders regardless of legal category. However, in the present study, it was found that men who self-injured reported experiencing more anxiety (although this was not statistically significant), and significantly more anger directed towards themselves and towards others in response to social-put downs than those individuals who did not self-injure. While the former reported a more extreme reaction to criticism, contrary to prediction, both groups endorsed a similar pattern of emotional responses on this measure. The most frequent reaction to social put-down in men was to experience anger towards others, followed by anxiety/distress and then anger towards themselves. This heightened angry reaction following criticism amongst the men who self-injured could be viewed as the result of an actual or potential downgrading or loss of social standing (Allan & Gilbert, 2002). While some people appear to have a robust internal sense of their own self-worth and are able to defend themselves or dismiss criticism as problems in the criticiser (Gilbert & Miles, 2000), others are highly dependent on external signals of approval to maintain their sense of self-worth (Gilbert, 1997a). The fact that men who self-injure endorse greater sensitivity to social put-downs seems to suggest that they are 'rank sensitive' or more 'insecure' in their perceptions of social rank (i.e. they find it more difficult to maintain favourable social comparisons), than males who do not self-injure. Furthermore, it is suggested that those individuals who are susceptible to perceiving themselves to be in low status positions are more vigilant to social threats (Sapolsky,

1989, 1994), engage in submissive behaviour at a much higher frequency (Gilbert & McGuire, 1998), are less inclined to express anger directly (Price, 1988; Scott, 1990) and more frequently inhibit hostility towards equal and higher ranking people (Allan & Gilbert, 2002; Price et al., 1994) than those who consider themselves to be dominant.

In contrast, it is thought that more dominant individuals feel freer in expressing their anger and aggression and use it as a means to assert their rank, authority and control (Scott, 1990). In support of this, Morrison & Gilbert (2001) found that in response to provocation, primary psychopaths perceived themselves to be significantly higher in social rank but lower in shame, anger, self-blame and anger towards others than secondary psychopaths. They propose that primary psychopaths' 'presumption' of social dominance acts as a buffer against feelings of self-doubt and uncertainty. Secondary psychopaths are less able to create this confident, dominant image and therefore assume defensive, subordinate positions within a psychopathy hierarchy. Their sensitivity to attacks from both those of higher and lower social rank may account for the increased feelings of shame, anger and resentment noted by Blackburn (1996).

Although this study investigated the experience of emotion rather than its expression, it is possible that individuals who self-injure feel unable to communicate directly following social-put downs, due to a fall in their perceived social rank and subsequent increase in submissive strategies. Being unable to 'retaliate' in response to feeling humiliated by others may then provoke further internal shame and self-directed anger. When suppressed emotions become intolerable, self-injury may

serve a self-soothing or tension reducing function. In addition, where anger is turned inwards onto what individuals perceive to be their inadequacies or shortcomings, self-injury may also serve as a punishment (Feldman, 1988). In examining a range of effects immediately before, during and immediately after an episode of self-injurious behaviour, Briere and Gil (1998) found that self-injury was reported by participants to reduce fear, anger towards self and anger towards others.

### **4.3 Theoretical implications**

As can be seen from the discussion so far, there is no one psychological model of self-injurious behaviour that can completely account for the findings in this thesis. However, certain aspects of previous models have been supported. More specifically, individuals who self-injure report that they are more sensitive to experiencing a heightened angry reaction following social put-downs and criticism than those who do not self-injure. In addition, they have greater difficulties in controlling and moderating resulting strong emotions. As studies indicate that self-injury has been reported to reduce a range of feelings (Briere, 1996; Briere & Gil, 1998; Favazza & Conterio, 1989; Walsh & Rosen, 1988; Wilkins & Coid, 1991; Winchel & Stanley, 1991), this provides further evidence for affect regulation models of self-injury.

Secondly, the findings indicate that some individuals experience an increase in perceived social rank following the act of self-injury. It is hypothesised that this may, in part, relate to linking pain with the provision of care and/or anticipating attention and concern from others. In particular, those individuals who self-injure

appear to have greater difficulties in recalling specific events. As previous studies have indicated that over-general recall has been associated with a problem-solving deficit (Sidley et al., 1997; Williams & Broadbent, 1986), eliciting help from others via self-injury may be the only means an individual has to solve their difficulties (Linehan, 1993). Alternatively, as those who self-injure have greater difficulties in forming and maintaining meaningful relationships, increased social rank may derive from anticipating raised social status amongst peers following self-injury. In support of this, observations during this study suggest that self-injury does not carry the same social stigma as it does within the general population and that it may actually be a way of indicating strength and bravado to others. At the very least, it seems that there is an interaction between the self-injurer and the social context which adds support to environmental models of self-injury.

#### **4.4 Clinical implications**

Although exploratory, the findings of the present study highlight a number of areas of clinical interest.

Firstly, the IASC measure appears useful in pinpointing specific marked difficulties experienced by those who self-injure. Information obtained from the IASC scores would be relevant not only to psychodynamic therapists, but also to clinicians providing cognitive-behavioural therapy, dialectical behaviour therapy or interpersonal therapy. This measure may be effective in alerting clinicians to the possibility of treatment-disrupting issues (e.g. abandonment concerns, idealization-devaluation cycles, or excessive suggestibility). The findings of this study also

indicate that effective treatment of self-injury should specifically address areas of impaired self-capacities. In particular, interventions should focus on exploration of alternative methods of reducing distress (e.g. physical exercise or distraction); teaching cognitive and behavioural strategies for dealing with painful internal states; strengthening internal affect regulation capacities, and finally, reducing the distress and dissociative symptoms that may underlie and motivate involvement in self-injury (Briere, 1996; Linehan, 1993; Walsh & Rosen, 1988).

Secondly, these findings indicate that males who self-injure report an increased sensitivity to social put-down and criticism. Gilbert (1997b) suggests that some patients may have learnt only two ways of dealing with conflict; backing down and seething with resentment, or lashing out and then feeling ashamed, guilty, and out of control. Both these strategies may lead to a fall in SAHP. It could be suggested that gaining a greater confidence in the ability to deal with stressful situations could be beneficial. Therefore treatments should focus on the development of social skills including improving assertiveness skills, teaching individuals how to cope with interpersonal conflicts and to express opinions, whilst at the same time avoiding damage to either relationships or the person's self-respect (Linehan, 1993). In fact, many authors note that individuals who self-injure have difficulty in expressing their emotions. Suyetmoto and MacDonald (1995) suggest that decreasing or refraining from self-harming behaviours may be related to (1) a greater acceptance of their own emotions and learning to express feelings verbally, (2) learning to tolerate intense emotion and alternative ways of interacting with others, and (3) the development of clearer boundaries and finding other ways to affirm their sense of self. Dialectical behavioural therapy which encompasses these ideas, has so far largely been utilised

amongst females patients who self-injure. This present study provides further evidence to suggest that males who self-injure may also benefit from such interventions.

Thirdly, the correlation between over-general memory and self-injury suggests that patients who self-harm may find it difficult to remember both experiences of mastery and the techniques used to overcome difficulties. Consequently, Williams (1997) suggests that during therapy patients should be encouraged to be vigilant for any occurrence of over-general memories and provided with training in how to search for a particular event. For example, cues such as activities, places, people, or time periods might be systematically tried in order to find out which particular combination of cues is most helpful for the individual. The use of diaries to record activities, moods and thoughts, commonly used in cognitive-behavioural therapy (Beck et al., 1979), may help to encourage specific encoding and retrieval. Thus, interventions should involve repeated practice of recalling beyond a general description of either past episodes of self-injury (Linehan, 1993) or current problems. In addition, emphasis on identifying discrete, personally relevant problems; 'brainstorming' potential solutions and generating further measurable targets in the light of results obtained may prove effective for those individuals who use self-injury as a response to what seem like insurmountable problems in living (Salkovskis et al., 1990; Sidley et al, 1997).

The evidence that individuals experience a dramatic fall in perceived social rank prior to self-injury is also clinically relevant. As feeling relatively inferior and less attractive than others is associated with a range of defensive strategies including an

increase in shame, social anxiety, envy, resentment, self-criticism and self-blame (Gilbert & Miles, 2000), interventions should help individuals to re-evaluate social relationships in less competitive rank-centered ways. This could be achieved by focusing on more co-operative forms of interactions and modifying schema relating to constructs of 'inferior-superior' and gaining and losing status (Gilbert, 1989; Trower & Gilbert, 1989; Trower, Shearing, Beech, Horrop, & Gilbert, 1998). Application of this approach may be particularly relevant for individuals at times when they experience a fall in perceived social rank e.g. following social put-downs and/or just prior to self-injury. Therapists could explore the variety of submissive behaviours that patient's engage in (e.g. social avoidance and concealment) and how these may relate to evaluations of social status and self-harming behaviours. It may also be beneficial to examine shame related cognitions associated with coping behaviours (e.g. thoughts such as 'I should not back down' may lead to self-directed anger after withdrawing) and emotional reactions (e.g. 'I have no right to be angry with others' may lead to self-blame and shame). It is believed that speaking openly to patients about shame or loss of pride may have a powerful cathartic effect, with some patients thereafter feeling better understood and accepted by the therapist (Pines, 1995).

The finding that some individuals experience a marked increase in perceived social rank following the act of self-injury suggests that rather than merely representing a psychological symptom, self-harm may serve immediately useful purposes. Identifying specific gains in terms of social status relating to rank, attractiveness and/or fit, could encourage the individual to find ways to replace self-harm with more adaptive patterns of behaviour. In this context, Walsh and Rosen (1988)



propose that group therapy for individuals who self-harm should address the implications of self-harm as a means of obtaining intimacy and nurturance and encourage individuals to develop alternative methods of obtaining care.

Finally, self-harm is a means of coping with tension, distress, or perceived lack of control. However, it is proposed that it is also a function of social factors in the ward environment as much as individual psychopathology (Liebling et al., 1997). Attempts to deal with self-harm should therefore include not only interventions aimed at managing individual emotional distress, but also changes in the therapeutic climate of wards and staff reactions. In particular, staff should be encouraged to reward skilled, assertive behaviour by patients. In addition, they should recognise that some individuals prefer help to be offered (especially prior to self-injury), rather than asking for it themselves, as this may lower self-esteem and increase feelings of shame. Thus, the focus should be upon prevention of self-harm rather than post-injury management.

## **4.5 Limitations of the study**

### **4.5.1 Sample**

Whilst every eligible participant within the hospital was approached for the study, the number of participants recruited was lower than had been intended. Typically within a forensic setting, a proportion of patients are too unwell to be approached and others do not wish to be interviewed for research purposes (Moore & Gudjonsson, 2002). It is possible that there are real differences between those who self-harm and

those who do not in terms of past 'shaming' experiences, and reported levels of external shame and depression etc. However, the use of small sample sizes meant that there was a potential for type II errors. Thus, low statistical power could account for findings which indicated particular trends but where results did not quite meet the conventional 5% level of statistical significance.

(1) Representativeness of self-harmers within the hospital

Within the population of men who self-injured in the hospital variability in the practice of self-harm alone suggests that there were likely to be individual differences amongst this group. In terms of frequency, many of the male participants self-harmed occasionally (once or twice a year), some appeared to have cyclical patterns of self-harming behaviour, and a subgroup of individuals self-injured consistently and frequently (more than once a month). If a larger sample size had been available it would have been useful to distinguish between participants who 'experiment' with self-injury and those who chronically engage in the behaviour. As mentioned previously (p. 96), it is unclear whether those who chose to participate held a different view of their self-injurious behaviour than those who declined. Finally, the aetiology of self-injury is clearly multi-factorial, if only because it occurs in such a wide range of conditions. In support of this, Suyetmoto (1998) suggests that individuals with dissociative disorders may utilize self-injury to create boundaries and as a way of dealing with dissociative characteristics of their disorder. Self-injurious behaviour amongst psychotic patients may be a response to command hallucinations and/or delusions, frequently involving religious or sexual themes. For others, self-injury may be a way to express or externalise emotions, and/or even

create a sense of identity. While the study had initially proposed to attempt to differentiate between these subgroups of individuals by using the Self-Injury Motivation Scale (SIMS, Osuch, Noll, & Putnam, 1999), this particular measure did not gain ethical approval as it was thought that it might increase the urge to self-harm amongst the more vulnerable individuals within the hospital. In addition, the functions of self-injury may change over time for the individual.

## (2) Gender differences

In the present study there were only six females within the hospital who met the criteria for a comparison group. Consequently, this limited the extent to which meaningful analysis could be carried out on the responses provided by females who self-injured. Thus, it is unclear if women who self-injure also perceive themselves as lower social rank, are more sensitive to social put-downs and endorse higher levels of shame and depression than females who do not. It therefore remains difficult to ascertain whether or not there are gender-specific issues which contribute to the causes of self-injury.

## (3) Effectiveness of matching

The two male groups appeared to be relatively well matched with regard to index offence, legal category, ethnic origin, estimated IQ and length of time resident in the hospital. However, male participants who self-injured were significantly younger than those who did not self-injure. While studies have been carried out on the IASC questionnaire to investigate possible effects of age (see p. 89), there is no research

evidence available on the other measures used in this study. Consequently, increased maturity amongst non self-harmers may be one factor which may account for lower levels of shame, depression and sensitivity to social put-downs when compared with those individuals who did not self-injure.

#### (4) Generalisability

This study examined self-mutilative behaviour amongst mentally disordered offenders in a high security setting. Therefore these findings may be generalizable to other individuals in secure inpatient settings where individuals have similar levels of psychopathology. While there is also a large population of individuals who self-injure but do not require inpatient treatment, Suyetmoto (1998) notes that, 'basing etiological and functional theories and therapeutic interventions on this sample may do a disservice to the self-mutilators who are not as disturbed as the inpatient population' (p. 550). In support of this, Allen & Gilbert (1995) note that the relevance of social comparison appears to depend upon the social environment and the degree of psychological difficulties present. For example, they found a much stronger correlation between social comparison and psychopathology amongst a clinical group compared with a non-clinical population.

In terms of social rank, while notions of strength, power, the ability to win competitions and to 'fit' in with the group may remain the same, behaviours reinforced in order to achieve these goals may be differ significantly according to the context. Within institutions there may be less stigma associated with the use of self-

injury than within the general population where such behaviours may be more likely to result in the loss of general perceived or actual social status.

#### 4.5.2 Design

As mentioned previously, this study was unable to investigate the relationship between particular variables believed to be associated with self-injurious behaviour amongst the female population. In addition, the sample sizes within the male group were relatively small. Further research with a larger sample size, involving participants across the three high security hospitals for example, may yield a larger number of significant findings concerning differences between individuals who self-injure and those who do not within the mentally disordered population.

Secondly, as this was a quantitative study, firm conclusions cannot be drawn relating to the meaning of perceived changes in social rank associated with self-harming behaviours. Gathering qualitative information may have enabled a greater understanding of the impact of the environment (e.g. peers and staff) both pre and post injury amongst males and females.

Thirdly, as suicide attempts were not included within the definition of self-injurious behaviour, eight (53%) participants with at least one previous suicide attempt during their life were included in the comparison group. While self-injury and suicide attempts are considered conceptually different, research suggests that there may also be some overlap. Ideally, exclusion of patients with histories of suicide attempts

from both groups would have prevented the possibility that self-injury and suicide may be confounded on certain measures.

#### 4.5.3 Measures

All the measures used in this study were self-report questionnaires and therefore dependant upon participant's openness, self-awareness and comprehension of items. Andrews (1998) suggests that responses may not accurately reflect what people actually feel, think or do in real life situations but rather provide a reflection of how people would like to see themselves. Some participants may have been keen to portray themselves in a positive light. Despite providing a full explanation relating to issues of confidentiality and anonymity, individuals may have feared that revealing psychological difficulties, even within the context of a research interview, may have had implications for their disposal (i.e. longer stay). This may be one reason that male participants (regardless of whether or not they self-injured) endorsed lower levels of shame, less anxiety/distress following social put-downs, and perceived themselves as higher social rank than counterparts in non-clinical populations.

Secondly, participants were asked to think about how they felt about themselves in relation to others in the few minutes prior to and following a typical incident of self-harm in order to complete the Social Comparison Rating Scale (SCR, Allan & Gilbert, 1995). While a retrospective approach can provide useful information, one shortcoming is that respective recall is believed to be subject to forgetting as well as systematic biases based upon the participants knowledge of their current difficulties

(Alloy, Abramson, Raniere & Duffer, 1999). For example, Brown and Harris (1978) note that individuals with social phobia may recall more humiliating experiences in their past than non-socially phobic controls in an effort to explain their current social anxiety. Similarly, depressed individuals have been credited with negatively distorted or mood congruent perceptions of reality (Beck et al., 1979). It is therefore questionable to base conclusions upon the recall of information about past episodes of self-injurious behaviour, particularly amongst individuals who appear to have difficulties in recalling specific events. However, if individuals currently believe that they will experience an increase in social rank following self-injury, it would be more likely that they would use this strategy again in the future. In this context, gaining a greater understanding of perceived social rank may be useful.

Andrews and Brown (1993) found that global self-referent questionnaires such as the Other as Shamer Scale (OAS, Goss et al., 1995) may be vulnerable to mood-state effects. Secondly, the OAS has not been investigated for use within forensic populations. This measure tends to focus on meta-cognitions (i.e. how the person appears to others) and it is possible that some individuals, particularly those with psychotic illnesses and/or autistic features, may have had difficulty in thinking about other people's perspectives. This may be another reason that male participants (regardless of whether or not they self-injured) endorsed lower levels of external shame than individuals in non-clinical populations. Thirdly, it may have been more appropriate to use a state (rather than trait) shame measure such as the Test of Self-Conscious Affect (TOSCA) (Tangney, 1989) which examines the disposition to feel shame in shame eliciting situations. Similarly, it may have been useful to measure reported levels of shame prior to, during and following self-injurious behaviour in

order to try to examine the relationship between shame and self-harm. Finally, Gilbert (2000b) notes that present shame measures do not capture the richness of shame experiences. In particular, there is evidence that a propensity to feel shame relating to personal characteristics, behaviour and the body, are to some extent independent (Andrews & Hunter, 1997). For example, an individual may experience bodily shame but not feel ashamed of their self-injurious behaviour. During the present study it would have been useful to pinpoint the areas in which participants experience shame.

The Sensitivity to Social Put-Down Scale (SPD, Gilbert & Miles, 1999) involves measuring beliefs about how individuals think they would feel in a hypothetical situation. However, the degree to which this would translate into actual feelings in real life situations is unclear. In addition, this measure does not indicate whether the person involved in the social put-down was perceived to be of higher or lower rank than the respondent. It is possible that emotional responses would be affected by social contextual factors including the relative difference in rank between the individuals, levels of perceived competency to offer criticism and the implications of put-down.

#### **4.6 Future research**

Preliminary findings in this exploratory study confirm the usefulness of this line of inquiry and suggest a number of other areas for future research. Firstly, the study requires replication with a larger sample (e.g. a multi-site project).



More research is obviously necessary on the long-term effects of childhood abuse and other 'shaming' experiences amongst males. In particular, attempts should be made to discriminate abuse-specific from abuse-concurrent, abuse-antecedent, and post-abuse events (Boudewyn & Liem, 1995; Briere, 1992). As the majority of the studies carried out so far have been cross-sectional, the future use of longitudinal studies may also highlight both the contributing and the mediating factors that may protect against the outcome of self-harm (Santa Mina & Gallop, 1998). Finally, the use of qualitative studies may help to identify the contextual aspects of these variables.

Secondly, research could be carried out in order to explore the relationship between memory, self-harming behaviour and personality 'traits' using a wider variety of personality measures. In addition, work needs to be carried out to explore whether autobiographical memory can be modified by direct clinical intervention (Sidley et al., 1997).

Further research is necessary to examine the relationship between social rank, emotional and behavioural reactions to social put downs, and self-injury. In order to enable this, more needs to be done to develop adequate measures and methodologies to explore this area. Possible approaches may include examining typical scenarios of social put-down, people's attributions associated with them and their emotional responses. In addition, examining situational specificity e.g. strategies used in relation to different ranking individuals such as those in authority, peers etc., amongst more vulnerable individuals as opposed to non-clinical populations is warranted. Such work may clarify which factors contribute to social rank ratings and the relationship between social rank and self-harm. More specifically this may

include exploring the extent to which shame functions as an antecedent, concomitant and/or consequence of self-injurious behaviour.

Finally, there needs to be more information relating to the factors that contribute to the cessation of self-injury and the therapeutic techniques that are most effective in helping these individuals (Suyemoto, 1998). Such work would in turn enable a greater theoretical understanding of the processes and mechanisms involved in self-injury.

#### **4.7 Conclusion**

Despite the methodological shortcomings noted above, this research has highlighted several variables of clinical interest within this client group associated with self-injury. In addition, reported changes in perceived social rank associated with the act of self-injury indicate that social comparison plays some part in either prompting and/or maintaining the behaviour. The findings provide preliminary evidence for the development of interventions directed at addressing self-injuring individual's perceived social status, difficulties in the areas of self-capacities (relatedness, identity and emotion regulation), and autobiographical recall.

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## **Appendices**

**Appendix I: Broadmoor Hospital Authority Ethics Committee Approval Letter**

B R O A D M O O R  
HOSPITAL AUTHORITY

23 March 2001

REF: 03 JAN 01

Dear Ms Mallindine,

**Re: TO WHAT DEGREE DOES SOCIAL RANK THEORY HELP US UNDERSTAND  
SELF-INJURIOUS BEHAVIOUR IN A SPECIAL HOSPITAL?**

The Ethics Committee reconsidered your application in the light of your response to its letter of 16 January 2001.

The Committee is pleased to approve the project, and is confident that, should any of the interviews cause distress to the patient, you will take the appropriate action in alerting ward staff.

The Committee wish to be kept informed of your progress and acceptance of your proposal has been given on the condition that the Secretary, Mrs Mandy Whittingham, receives six monthly progress reports, together with a copy of your final findings. Any changes to the protocol made subsequent to this application must be notified to the secretary. If the project is not begun within two years then a resubmission will be necessary.

Yours sincerely



P.P. The Reverend Dr Peter Goold  
Chairman  
Ethics Committee

B R O A D M O O R  
HOSPITAL AUTHORITY

16 January 2001

REF: 03 JAN 01

Dear Ms Mallindine

**RE: TO WHAT DEGREE DOES SOCIAL RANK THEORY HELP US UNDERSTAND  
SELF-INJURIOUS BEHAVIOUR IN A SPECIAL HOSPITAL?**

The Committee considered your application at its meeting on Monday 15 January 2001.

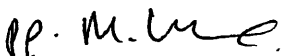
Whilst the Committee was generally supportive of your intentions it was felt that the study required reshaping. The Committee understands it to comprise of two parts; the first examining whether social rank theory helps explain self-injurious behaviour through the mechanisms of 'shame' and 'bullying'.

Concerns were expressed over the second part of your study (examining motivation for self-harm) in as much that some of the questions might create the risk of self-harm in vulnerable patients; and that some responses may be open to change according to mood. In addition it was felt that it created considerable extra work within a patient cohort already extensively involved in research.

The Committee therefore recommends that you undertake the first part of your study, and suggests that you consider using patients from a wider spectrum of disorder, rather than confining your subjects to people presenting with Personality Disorder. This may also help you achieve the number of subjects and controls more readily. It is suggested that you contact Dr Scragg and Dr Moore and resubmit your protocol after discussion with them. In order to be considered at the March Committee Meeting all papers must reach the Secretary, Mrs Mandy Whittingham, no later than Monday 19 February 2001.

Dr Mary Hill, who is a member of the Committee, will in the mean time have spoken to your supervisors in order to help you to achieve your objective.

Yours sincerely



The Reverend Dr Peter Goold  
Chairman  
Ethics Committee

cc Dr Mary Hill

**Appendix II: Letter to the Responsible Medical Officer requesting consent  
to approach patients**

**Study of Social Comparison and psychological well-being.**

Dear

I am interested in carrying out a study to investigate the relationship between perceived social rank and deliberate self-harm in patients within Broadmoor. The project was approved by the Ethics Committee on 23 March 2001 and my supervisors are Peter Scragg and Estelle Moore.

Gilbert's work on shame and depression suggests that humans have an innate need to rate themselves in relation to others. An inability to cope with such emotions may be a contributory factor in self-harming behaviours.

**Procedure**

The study will involve asking patients to participate in a formal interview. This will consist of completing a number of self-report measures designed to examine feelings and attitudes to social put down and criticism, levels of shame, feelings of depression and identity. Basic background information will also be collected from the files and ward records.

It is intended that findings may assist in understanding feelings of shame in self-harming behaviour and indicate a specific intervention aimed at ameliorating these feelings.

During the study I am interested in interviewing male and female patients with a primary diagnosis of personality disorder or mental illness. The 'experimental' group will consist of patients who have self-harmed and a 'control' group which will consist of patients who have no known history of self-harm.

I have liaised with the team psychologist for each of the wards, and those patients under your team's care who I believe meet the criteria for the self-harm group are highlighted on the attached form. Also listed are those who I am not aware have a history of deliberate self-harm. **I am writing to ask permission to approach all of those who have self-harmed and possibly, at a later date, some of those who have not self-harmed to invite them to participate in this project.**

For those patients you feel able to give consent for me to approach, I would make an appointment to discuss the research. A full briefing will be given to these patients as part of the informed consent procedure. **Please reply to me at the Psychology Department at your earliest convenience.**

I am happy to meet with your clinical team to provide any further information on practical details or on the research project itself that you might require. Please do not hesitate to contact me via the Psychology Department. Many thanks in advance for your support. I look forward to hearing from you.

Clare Mallindine (x4852 or 4146)  
Trainee Clinical Psychologist  
Psychology Department

Supervised by:  
Dr. Peter Scragg (x 4138; Tues, Wed)  
Dr. Estelle Moore (x 4143; Mon – Thurs)

## **Appendix III: Written Information given to Participants**



## Patient Information Sheet

### **Study of Social Comparison and psychological well-being.**

I am carrying out a study to try to find out about self-harm when people are living in a hospital environment.

#### What would taking part involve?

Taking part would involve an interview in which I would ask you about how you view yourself, and if (and how) you compare yourself with others. I would invite you to complete some questionnaires which are designed to help us understand what is associated with self-harm. Overall, the interview should not last more than 2 hours.

#### How will the project be helpful?

Hopefully, the results will give us a better indication of the sort of help people might benefit from to enable them cope better with situations that provoke strong emotions.

#### What next?

If you would like to be involved in this study I would arrange a time convenient to you. In order to do this work I will also need to be able to look at your clinical case records. The content of our meetings will be treated as confidential.

If you require any further information please let me know.

Clare Mallindine

## **Appendix IV: Consent Form and Self-report Measures**

**BROADMOOR HOSPITAL AUTHORITY**

**Study of Social Comparison and psychological well-being.**

I ..... agree to take part in this study the nature and purposes of which have been fully explained to me.

I understand that I am under no obligation to take part in the research and that I may freely withdraw consent at any time. Whether or not I decide to participate in this project, it in no way affects my right to access to treatment within the hospital.

I also understand that information collected about me in relation to this research will be treated as confidential and only to be inspected by authorised personnel. I am aware that the results of this study may be published, but that all participants remain anonymous.

Signed: .....

Witnessed by: .....

Date: .....

I confirm that I have explained the research to .....

Researcher: .....

Date: .....

### I.A.S.C.

This questionnaire lists a number of experiences people sometimes have in their lives. Some of these are experiences people have with other people, and some are experiences that people have on their own. Please circle the one answer that best indicates how often each of these experiences has happened to you **in the last 6 months**.

Circle 1 if it has **NEVER** happened in the last 6 months.

Circle 2 if it has happened **ONCE OR TWICE** in the last 6 months

Circle 3 if it has happened **SOMETIMES** in the last 6 months

Circle 4 if it has happened **OFTEN** in the last 6 months

Circle 5 if it has happened **VERY OFTEN** in the last 6 months

If you make a mistake or change your mind, **DO NOT ERASE!** Mark an "X" through the incorrect answer and then draw a circle around the correct answer.

Please answer each item as honestly as you can. Be sure to answer every item.

#### **In the last 6 months, how often have you experienced the following:**

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Problems in your relationships with people                                       | 1 | 2 | 3 | 4 | 5 |
| 2. Suddenly hating someone you used to like a lot                                   | 1 | 2 | 3 | 4 | 5 |
| 3. Feeling that someone you cared about might leave you                             | 1 | 2 | 3 | 4 | 5 |
| 4. Feeling like you didn't know yourself very well                                  | 1 | 2 | 3 | 4 | 5 |
| 5. Being easily influenced by others  | 1 | 2 | 3 | 4 | 5 |
| 6. Not being able to calm yourself down   | 1 | 2 | 3 | 4 | 5 |
| 7. Throwing or hitting things during an argument as a way of getting your anger out | 1 | 2 | 3 | 4 | 5 |
| 8. Not getting along with people  | 1 | 2 | 3 | 4 | 5 |
| 9. Looking up to people and then being disappointed by them                         | 1 | 2 | 3 | 4 | 5 |
| 10. Feeling abandoned by people   | 1 | 2 | 3 | 4 | 5 |
| 11. Wishing you understood yourself better  | 1 | 2 | 3 | 4 | 5 |
| 12. Being talked into something too easily  | 1 | 2 | 3 | 4 | 5 |
| 13. Having a hard time calming down once you get upset                              | 1 | 2 | 3 | 4 | 5 |
| 14. Hurting yourself as a way of getting rid of upsetting feelings or thoughts      | 1 | 2 | 3 | 4 | 5 |
| 15. Getting into arguments with people  | 1 | 2 | 3 | 4 | 5 |

16. Finding out that people you thought were wonderful really weren't wonderful at all	1	2	3	4	5
17. Worrying that someone was trying to end their relationship with you	1	2	3	4	5
18. Feeling like you don't understand your own behaviour	1	2	3	4	5
19. Being talked into doing something that you really didn't want to do	1	2	3	4	5
20. Being out of control emotionally	1	2	3	4	5
21. Eating more food than you needed in order to feel better or to calm down	1	2	3	4	5
22. Having lots of ups and downs in your relationships with people	1	2	3	4	5
23. Thinking someone was much better than they really were	1	2	3	4	5
24. Doing just about anything to keep someone from leaving you	1	2	3	4	5
25. Getting confused about what you want in life	1	2	3	4	5
26. Agreeing with people too easily	1	2	3	4	5
27. Not being able to control your anger	1	2	3	4	5
28. Hurting yourself in some way in order to calm yourself down or to stop feeling empty	1	2	3	4	5
29. Conflict in your relationships	1	2	3	4	5
30. Your feelings about people changing quickly from good to bad	1	2	3	4	5
31. Thinking someone didn't care about you anymore even though they said they did	1	2	3	4	5
32. Feeling like you don't really have an identity	1	2	3	4	5
33. Believing what someone told you, even though it didn't make sense	1	2	3	4	5
34. Wishing you could calm down but not being able to	1	2	3	4	5
35. Getting into a fight just to get your anger out	1	2	3	4	5
36. Becoming upset with a friend or lover	1	2	3	4	5
37. Putting someone on a pedestal and then finding out that they weren't who they pretended to be	1	2	3	4	5
38. Being afraid someone would stop loving you	1	2	3	4	5

39. Losing track of who you are and what you want when you are with other people	1	2	3	4	5
40. Wishing you weren't so easily led by others	1	2	3	4	5
41. Your moods changing quickly	1	2	3	4	5
42. Using sex as a way to stop you feeling bad	1	2	3	4	5
43. Having trouble getting along with people at work, school or in your neighbourhood	1	2	3	4	5
44. Thinking someone was much more interesting than they actually turned out to be	1	2	3	4	5
45. Getting very upset when someone seemed like they were trying to pull away from you	1	2	3	4	5
46. Getting confused about what you want when you are with other people	1	2	3	4	5
47. Letting other people tell you what to do	1	2	3	4	5
48. Having many ups and downs in your feelings	1	2	3	4	5
49. Doing things to stop feeling so much pressure or pain inside	1	2	3	4	5
50. Having disagreements with people	1	2	3	4	5
51. Feeling disappointed by people after you got to know them	1	2	3	4	5
52. Feeling empty when people went away from you	1	2	3	4	5
53. Feeling like you become a different person when you are with certain people	1	2	3	4	5
54. Doing something because someone told you to, even though you didn't have to and didn't want to	1	2	3	4	5
55. Being very angry one minute and then feeling fine the next	1	2	3	4	5
56. Doing something sexual in order to calm yourself down	1	2	3	4	5
57. Getting into fights with people	1	2	3	4	5
58. Wishing people would stay as exciting as when you first met them	1	2	3	4	5
59. Feeling angry when you felt someone didn't want to spend time with you anymore	1	2	3	4	5
60. Losing your identity when you are in a relationship	1	2	3	4	5

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 61. Doing what someone said without stopping to think if it was a good idea | 1 | 2 | 3 | 4 | 5 |
| 62. Becoming happy for short periods of time but it not lasting             | 1 | 2 | 3 | 4 | 5 |
| 63. Doing something dramatic to distract yourself                           | 1 | 2 | 3 | 4 | 5 |

A. B. M. T.

**Instructions:** I am interested in your memory for events that have happened in your life. I am going to read you some words. For each word, I want you to think of an event that happened to you at a particular time (within one day) and place, which the word reminds you of. The event could have happened recently (yesterday, last week) or a long time ago. It might be an important event or a trivial event.

**Practice words:** enjoy, friendly,

The memory you recall should be a specific event. So if I said the word “enjoy” it would not be okay to say “I always enjoy a good party” because that does not mention a specific event, but it would be okay to say “I enjoyed myself at Monika’s party” because that is a specific event.

**Prompt:** Can you think of a specific time, one particular occasion?

**1. happy (Positive)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**2. sorry (Negative)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**3. safe (P)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**4. angry (N)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_



**5. interested (P)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**6. clumsy (N)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**7. successful (P)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**8. hurt (N)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**9. surprised (P)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**10. hostile (N)**

first response (secs) \_\_\_\_\_

second response (secs) \_\_\_\_\_

third response (secs) \_\_\_\_\_

date \_\_\_\_\_

**Total number of first responses that are specific** \_\_\_\_\_

**No. of positive cues where first responses is specific** \_\_\_\_\_ **Latency** \_\_\_\_\_

**No. of negative cues where first responses is specific** \_\_\_\_\_ **Latency** \_\_\_\_\_

**Total latency to specific memory (secs)** \_\_\_\_\_

### **B.D.I. – short form**

Instructions: On this questionnaire are groups of statements. Please read the entire group of statements in each category. Then pick out the statement in that group which best matches the way you feel today, that is, right now! Circle the number beside the statement you have chosen. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

**A (Sadness)**

- 3 I am so sad or unhappy that I can't stand it
- 2 I am blue or sad all the time and I can't snap out of it
- 1 I feel sad or blue
- 0 I do not feel sad

**B (Pessimism)**

- 3 I feel that the future is hopeless and that things can not improve
- 2 I feel I have nothing to look forward to
- 1 I feel discouraged about the future
- 0 I am not particularly pessimistic or discouraged about the future

**C (Sense of failure)**

- 3 I feel I am a complete failure as a person (parent, husband, wife)
- 2 As I look back on my life, all I can see is a lot of failures
- 1 I feel I have failed more than the average person
- 0 I do not feel like a failure

**D (Dissatisfaction)**

- 3 I am dissatisfied with everything
- 2 I don't get satisfaction out of anything anymore
- 1 I don't enjoy things the way I used to
- 0 I am not particularly dissatisfied

**E (Guilt)**

- 3 I feel as though I am very bad or worthless
- 2 I feel quite guilty
- 1 I feel bad or unworthy a good part of the time
- 0 I don't feel particularly guilty

**F (Self-dislike)**

- 3 I hate myself
- 2 I am disgusted with myself
- 1 I am disappointed in myself
- 0 I don't feel disappointed in myself

**G (Self-harm)**

- 3 I would like to kill myself if I had the chance
- 2 I have definite plans about committing suicide
- 1 I feel I would be better off dead
- 0 I don't have any thoughts about harming myself

H (Social withdrawal)

- 3 I have lost all of my interest in other people and don't seem to care about them at all
- 2 I have lost most of my interest in other people and have little feeling for them
- 1 I am less interested in other people than I used to be
- 0 I have not lost interest in other people

I (Indecisiveness)

- 3 I can't make any decisions at all anymore
- 2 I have great difficulty in making decisions
- 1 I try to put off making decisions
- 0 I make decisions about as well as ever

J (Self-image)

- 3 I feel that I am ugly or repulsive-looking
- 2 I feel that there are permanent changes in my appearance and they make me look unattractive
- 1 I am worried that I am looking old or unattractive
- 0 I don't feel that I look any worse than I used to

K (Work difficulty)

- 3 I can't do any work at all
- 2 I have to push myself very hard to do anything
- 1 It takes extra effort to get started at doing something
- 0 I can work about as well as before

L (Fatigability)

- 3 I get too tired to do anything
- 2 I get tired from doing anything
- 1 I get tired more easily than I used to
- 0 I don't get any more tired than usual

M (Anorexia)

- 3 I have no appetite at all anymore
- 2 My appetite is much worse now
- 1 My appetite is not as good as it used to be
- 0 My appetite is no worse than usual

**S. C. R. S.**

**Please place a mark on each line at the point which best describes the way in which you generally see yourself in comparison to others.**

**Example**

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

If you put a mark at 3 this means you see yourself as shorter than others: if you put a mark at 5-6 about average; and a mark at 8 somewhat taller.

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

Unlikeable       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

Undesireable    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

### S. P. D. – Self and Others.

Instructions: In certain social situations people can exhibit different emotions. For example, being late for a meeting may cause some people to feel anxious or irritated. Below you will find a list of situations which may cause you to feel either anxious or distressed, or angry/irritated or some degree of both. On the left hand side of the questions we would like you to indicate the degree of anxiety/level of distress you would feel for each situation. In the right hand columns how angry, irritated and annoyed you would feel with yourself and then with others. Please use the following scale.

1 = Not at all    2 = Somewhat    3 = Rather    4 = Very    5 = Extremely

How anxious/distressed						How angry / irritated with YOURSELF					How angry / irritated with OTHERS				
1	2	3	4	5	1. Being criticised	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	2. Being shown up in public	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	3. Being called a derogatory name e.g. stupid/ugly	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	4. Being treated like a child	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	5. Someone pointing out your unattractive qualities	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	6. Being looked at with contempt	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	7. Someone getting the better of you	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	8. Having your opinion Dismissed as irrelevant	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	9. People reacting critically to what you say	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	10. Being seen as inferior	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	11. Being told you are 'not good enough'	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	12. People running you down behind your back	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	13. Someone trying to make you look weak or stupid	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	14. People having a joke at your expense	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	15. Not being treated with respect	1	2	3	4	5	1	2	3	4	5

1	2	3	4	5	16. Someone picking on your faults	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	17. Being seen as a nuisance	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	18. Being told your performance is inadequate	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	19. Someone making fun of you in public	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	20. Someone making negative comments about your physical appearance	1	2	3	4	5	1	2	3	4	5