

Thesis Volume I

Attachment and coping in Borderline Personality

Disorder

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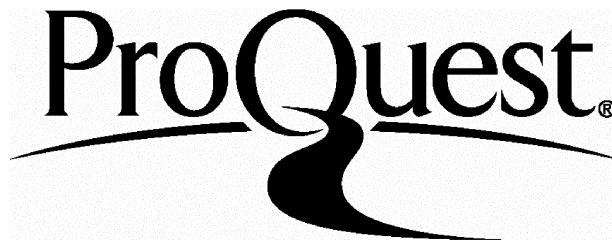
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ABSTRACT

Borderline Personality Disorder (BPD) is often characterised by maladaptive coping in stressful situations. Several studies have demonstrated a correlation between attachment style and an individual's ability to cope with stressful situations. The present study attempted to examine whether there was a relationship between attachment and coping in individuals with BPD.

A group of female participants diagnosed with BPD (n=22) were compared to a group of female participants with Axis I disorders (n=17), on a continuous measure of attachment (the Attachment Q-sort) and two coping questionnaires.

Scores on the Coping Inventory for Stressful Situations (CISS), a reliable and valid measure of coping designed to identify Task, Emotion and Avoidance Focused coping, were compared to scores on the Barnett Borderline Coping Questionnaire (BBCQ). A questionnaire designed by the researcher to identify the specific coping strategies of individuals diagnosed with BPD. The BBCQ was piloted on undergraduate medical students. The pilot study revealed three scales with high internal reliability, one scale that represented adaptive or helpful coping strategies and two scales which represented dysfunctional coping strategies.

The BPD group scored significantly higher than the psychiatric comparison group on the dysfunctional coping scales of the BBCQ. Analyses of covariance showed that this finding was not due to differences between the two groups' scores on the CISS scales, or to general psychopathology. It was therefore concluded that the BBCQ

appeared to measure something qualitatively different from the standard measure of coping (the CISS).

There were no significant differences between the two groups' attachment scores on the Attachment Q-sort. However, in line with other studies, the BPD group scored higher than the psychiatric comparison group for preoccupied and disorganised attachment. This trend in the data approached significance. It is argued that the failure to find a difference between the two groups is likely to be attributable to the small sample size and not the lack of sensitivity of the Attachment Q-sort.

The two groups were then combined and examined as one group with mental health problems. Regression analyses showed that severity of BPD and preoccupied attachment scores, not general psychopathology, accounted for the differences in coping scores. This finding indicated that: 1) The BBCQ measures coping in BPD (although this finding requires further research to establish that the BBCQ is measuring coping in BPD and not BPD itself). 2) Consistent with other research into attachment and coping there was some relationship between attachment and coping in this sample.

It is suggested that further research should examine the relationship between attachment and coping in a larger population of individuals with BPD. It is also suggested that, with further development, the BBCQ could become a useful tool in the evaluation of treatment approaches, which focus on facilitating the development of more helpful coping strategies with individuals with BPD.

INTRODUCTION

This chapter provides an overview of Borderline Personality Disorder (BPD), including a definition and historical context of the disorder. The biopsychosocial and attachment theories of BPD are then described, and the literature on coping, coping in BPD, and the literature on attachment and coping is reviewed. The treatment approaches developed from these models are then outlined. Finally, the research questions and hypotheses of this study are presented.

1.1 The nature and history of Borderline Personality Disorder

Stern (1938) coined the controversial word ‘borderline,’ in order to describe a group of largely female patients who did not seem to fit into the then standard psychiatric categories of neurotic or psychotic, and who were prone to narcissism, psychological rigidity, hypersensitivity, deep insecurity, difficulties reality testing in interpersonal situations and negative therapeutic reactions.

At the time, and for a long time afterwards, individuals with BPD were predominantly regarded as the preserve of the psychoanalytic community and seen as a significant group of individuals who appeared suitable for psychoanalysis but tended to improve little, if at all, in treatment. Analysis often had to be terminated and the patient hospitalised. A number of BPD patients also tended to deteriorate within supportive inpatient treatment programmes (Gunderson, 1984).

Since it first appeared as a formal diagnosis in the Diagnostic Statistical Manual III (DSM-III, APA, 1980), BPD has attracted increasing clinical and research interest.

Despite the plethora of therapeutic innovations in the field, BPD remains a complex disorder associated with severe functional impairment and a high suicide rate (Skodol et al, 2002). Patients with BPD utilise substantial health care resources, making frequent visits to their general practitioner, community mental health teams and to outpatient psychotherapy services (Bender et al, 2001; Tyrer, 1988). They also take up A&E time and inpatient beds on psychiatric wards. Whilst BPD has an estimated prevalence of 1-2% in the general population (Torgersen et al, 2001), 10% percent of outpatient mental health patients, 20% of psychiatric inpatients and 30-60% of patients in specialist PD services are thought to meet criteria for BPD (Hyman, 2002).

In addition, individuals with BPD present a significant problem to the services that they use and to the mental health professionals working in those services. Clients with BPD continue to need intensive and long term therapeutic support and remain notoriously difficult to treat because of their multiple problems, including; an inability to regulate their emotions, impulsive behaviours, chaotic interpersonal interactions, an unstable sense of self and intense fears of abandonment. These difficulties mean that they have limited resources with which to deal with stress. They often move from one crisis to the next, due to unhelpful coping strategies which compound their problems, such as substance or alcohol abuse and putting themselves in dangerous situations¹ (Clarkin et al, 1983). The inability of individuals with BPD to appropriately manage stressful situations also puts them at a high risk of harming themselves or others. According to Linehan (1993a) the behaviour most frequently associated with the BPD diagnosis is a pattern of intentional self-damaging acts and suicide attempts. 70-75% of patients with BPD have a history of at least one self-injurious act (Clarkin et al,

¹ For instance, the patient who impulsively has unprotected sex with strangers.

1983; Cowdry, Pickar & Davis, 1985). Estimates of suicide rates among BPD patients vary but tend to be approximately 10% (Paris, Brown & Nowlis, 1987; Stone, 1989), fifty times higher than in the general population (Work Group on Borderline Personality Disorder, 2001).

These individuals are not just difficult to treat because of the extent and intransigence of their difficulties but also because of the negative effects of their psychopathology on the treatment relationship. Many professionals working therapeutically with individuals with BPD have found that their affective instability and demands for special consideration and instant availability, coupled with the slowness and intensity of the work, leave them feeling helpless, inadequate and overwhelmed (Calahan, 1996). As a result, many NHS staff describe individuals with BPD as being extremely ‘manipulative’ and ‘attention seeking.’ However, this interpretation of behaviour infers not only intent from the outcome of the behaviour but also that this intent is artfully disguised – the definition of manipulative. For instance, although an episode of self-harm might cause distress to staff and greater attention for the individual, this does not necessarily mean that this was the individual’s intention in behaving in this way. Even if this outcome was the individual’s intention, a more probable reason for this behaviour, than manipulation, is that the individual has not learnt more appropriate ways of problem solving, or of seeking help from others. This negative inference about the individual’s intent, or capacity to act differently, is likely to leave the professionals involved feeling even more angry and frustrated (Linehan, 1993a).

Without a theoretical and practical way of making sense of these behaviours (e.g. as problems with managing stress/distress) both therapy and management can become

reactive, disciplinarian and even abusive for the patient (De Zulueta, 1999). It has been shown that in treating individuals with BPD, there is poorer implementation of treatment plans by hospital and clinic staff and high drop-out rates from therapy, compared to groups with other personality disorders or Axis I diagnoses (Bender et al, 2001). As a result, available treatment modalities are often regarded as failing, and clinically significant improvement is slow, often taking many years.

Research into BPD is therefore essential to promote understanding of the disorder. By linking theory and practice through research, current treatment techniques can be improved, and both the suffering of these individuals and problems encountered by staff carrying out therapeutic work with them, ameliorated.

In summary, there are a number of problems inherent in working with this client group. It is hypothesised, and will be argued here, that many of these problems are related to their difficulties building and maintaining positive relationships (as a result of their impoverished childhood relationships). It is also hypothesised that, as well as causing problems in every day life, therapeutic work is also complicated by the poor coping strategies of individuals with BPD and their resulting difficulties managing stressful situations. This project aims to build on previous research that has demonstrated the significance of the attachment relationship (see section on attachment) to mental health and to coping in stressful situations and to examine how this relationship is applicable to BPD. A clearer understanding of attachment in BPD will be a useful aid to improving the therapeutic relationship in work with these individuals. Further knowledge regarding the coping styles and strategies of individuals with BPD could be useful in facilitating the development of more adaptive

coping strategies. It is hoped that the development of a coping questionnaire, for use specifically with individuals with BPD, will be a helpful measure for identifying coping strategies in BPD and evaluating therapeutic change.

1.1.1 Validity of the borderline personality disorder diagnosis

Many people who work in the area of personality disorders and many individuals with BPD object to or dislike the label. Millon (1981, 1987) has been one of the most vocal dissenters against the term BPD and has suggested ‘cycloid personality’ to describe the behavioural and mood instability that he views as central to the disorder. More recently the term ‘emotionally unstable disorder’ has been proposed for the next edition of DSM.

However, it is not just the label that sparks debate and disagreement, the validity of the diagnosis itself has been called into question. Although DSM IV outlines the criteria for a diagnosis of BPD, there are still some people who argue that these individuals do not comprise one distinct diagnostic category. This is because individuals with the disorder can have quite different profiles, and may vary considerably in the severity of their disturbance and in the range of their symptomatology (Skodol et al, 2002). Meeting any five out of nine criteria is sufficient for a diagnosis of BPD. Many individuals with BPD also qualify for other Axis II diagnoses, particularly those in Cluster B (Histrionic, Antisocial and Narcissistic Personality Disorder) and the majority have concomitant Axis I disorders and in particular, mood disorders (Skodol et al, 2002).

In support of the validity of the BPD diagnosis, and its distinction from Axis I mood disorders, Gunderson (1996) argued that there are differences in the phenomenology of the affective experiences of individuals with BPD and of individuals with a primary affective disorder. It is not surprising that depression is a feature in a high proportion of cases of BPD because of the many negative life events experienced by and provoked by the emotional lability, impulsivity and poor interpersonal skills of these individuals. There is however no evidence of a common genetic cause for major depression and BPD and the quality of depression in BPD and its response to medication differ from that of depressive illnesses. Thus Gunderson & Phillips (1991) suggested that unipolar depression is characterised by guilt, remorse, active suicidal behaviour, a preoccupation with failure and a normally stable relationship pattern, whereas the BPD patient's depression is characterised by emptiness, angry neediness, a preoccupation with loss and frequent suicidal gestures. They also contrast the individual with major depression's proneness to long periods of low mood, with the BPD individual's reactive mood. Depression associated with borderline pathology appears to be in some respects unique as well as distinct from non-BPD depression (Rogers, Widiger & Krupp, 1995).

Evidence for BPD as a distinct diagnostic entity from other Axis I and II disorders, was also put forward by Fossati et al (1999). They conducted a study in which structured interviews were administered to a large group of patients with varied diagnoses. They concluded that the DSM IV criteria for BPD generally had good sensitivity and specificity and correlated better with each other than with the diagnostic criteria of other personality disorders. Sanislow et al (2002) reviewed the

different tools for the diagnosis of BPD and concluded that DSM IV has been shown to offer a satisfactory method of diagnosis, reflecting a statistically coherent construct. It appears that despite the ongoing debate surrounding the range in symptomatology of individuals with BPD and the overlap with Axis I and other Axis II disorders, there is a body of data pointing to the validity and reliability of the DSM IV diagnosis of BPD.

1.1.2 The diagnostic criteria for BPD

At the time that DSM III (APA, 1980) was developed, there was little research data on BPD and the definition of BPD was the source of much controversy and debate. The DSM III criteria were therefore a combination of compromise (between the theoretical orientations of committee members of the American Psychiatric Association), attention to empirical data and how psychiatrists and psychologists use the term in practice. Over 300 studies based on the DSM III criteria have now been completed and a ninth criterion added on the basis of rigorous research (see diagnostic criteria below).

In DSM IV (APA, 1994), personality disorder (PD) is described as “an enduring pattern of inner experience and behaviour that deviates markedly from the individual’s culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time and leads to distress or impairment” (pg. 629). (This pattern of behaviour must not be attributable to the direct physiological effects of a substance or general medical condition).

BPD is defined as “a pervasive pattern of instability of interpersonal relationships, self-image and affects and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by at least five of the following:” (pg. 654).

1. Frantic efforts to avoid real or imagined abandonment (not including suicidal or self-mutilating behaviour covered in criterion 5).
2. A pattern of unstable and intense interpersonal relationships characterised by alternating between extremes of idealisation and devaluation.
3. Identity disturbance: persistent and markedly disturbed, distorted or unstable self-image or sense of self (e.g. feeling that one does not exist or embodies evil).
4. Impulsiveness in at least two areas that are potentially self-damaging (e.g. spending, sex, substance abuse, shoplifting, reckless driving, binge eating – not including suicide or self-mutilating behaviour covered in criterion 5).
5. Recurrent suicidal threats, gestures, or behaviour, or self-mutilating behaviour.
6. Affective instability: marked reactivity of mood (e.g. intense episodic dysphoria, irritability or anxiety) usually lasting a few hours and only rarely more than a few days.
7. Chronic feelings of emptiness.

8. Inappropriate, intense anger or lack of control of anger (e.g. frequent displays of temper, constant anger, recurrent physical fights).
9. Transient stress related severe dissociative symptoms or paranoid ideation.

Conceptualising BPD

A number of theoretical approaches have been used to conceptualise BPD. Those theories relevant to this study (the biopsychosocial, cognitive and attachment theories of BPD) are reviewed here. It is argued that BPD can be understood within the biopsychosocial theory of Borderline Personality Disorder (Linehan, 1993a) and that this conceptualization can be enhanced by linking the biopsychosocial theory to cognitive theory (Pretzer & Beck, 1996), and to work on attachment relationships (Bowlby, 1973) and their application to BPD (Fonagy, 2000).

1.2 The biopsychosocial theory of BPD

The main tenet of the biopsychosocial theory is that the central feature of BPD is emotion dysregulation (Linehan, 1993a). In support of the role of emotion dysregulation in BPD, Koenigsburg et al (2001) reported significant correlations between affective instability and the DSM IIR borderline traits, and in a prospective study Zanarini et al (2003) showed that affective symptoms in BPD take the longest to resolve. Studies have also demonstrated that individuals with BPD have a more limited capacity to process emotions than individuals without BPD and have more intense responses to negative emotions (Levine et al, 1997; Richman & Sokolove, 1992; Stuart et al, 1990). This dysregulation is viewed as the result of the child's biological disposition, their environmental context and the transactional nature of the

relationship between the child and their environment as they grow up (Linehan, 1993a). However, not all children who grow up within similar difficult environments will go on to become emotionally dysregulated adults, a factor that supports the significance of the role of the child's own nature and biology within the environment. Although it is unlikely that one biological cause can underlie all cases of BPD, certain biological and environmental influences are generally agreed to play a part. At the current time, research has not shown clear biological markers for BPD, but it is reasonable to suggest that genetic and organic factors influence a developing child's reactions to environmental stressors. Minor neurological damage may also play a role in the behavioural disturbance associated with the disorder (Van Reekum et al, 1993) and an association with BPD and adverse birth experiences has been reported (Soloff and Millward, 1983).

Linehan has termed the developmental arena of the individual with BPD, the 'invalidating environment.' By this she means an environment in which the developing child receives erratic and or inappropriate responses to expressions of their thoughts, beliefs, wishes and emotions. These responses tend to negate the private experience of the child through direct denial of the child's reality (e.g. 'you are not sad, stop crying;') by over reaction; (e.g. 'I'll give you something to cry about') or under reaction; (e.g. ignoring the child's response). The invalidating environment, which involves, at its most extreme, sexual, emotional and physical abuse, results not only in children whose needs are not met, but also in children who find it difficult to identify and experience their own internal world. Instead, they learn that it is safest to take their cues of how to think and feel from the environment, in order not to be punished, harmed or rejected. Not being taught to label or trust their

emotions, to modulate their arousal, or to tolerate distress, means that the child will learn to invalidate their own emotional responses, and fail to learn ways to problem solve effectively. Instead, their emotional expression is shaped, by erratic reinforcement, to oscillate between extreme emotional inhibition and disinhibition.

According to Fonagy (2000) the social inheritance of BPD may be an important clue to understanding the disorder. In support of the significance of the role of the invalidating environment in BPD, research has demonstrated clear evidence of a specific link between childhood maltreatment and the disorder. In particular, research has focused on and demonstrated that: childhood abuse and trauma is a significant factor in the aetiology of BPD (Herman, Perry & Vander Kolk, 1989; Ogata et al, 1990; Paris, Zweig-Frank & Guzder, 1994) and that the abusive experiences of BPD patients occur significantly earlier and involve the child's caregivers more often than the abusive experiences of other clinical populations (Herman et al, 1989; Ogata et al, 1990; Shearer et al, 1990; Zanarini et al, 1989). The connection between sexual abuse in female patients and BPD has long been recognised (Herman, 1986; Westen et al, 1990; Johnson, Cohen, Brown, Smailes & Bernstein, 1999) and it is estimated that 75% of individuals with BPD were sexually abused as children. Research has also shown that, as children, maltreated individuals frequently had caregivers within the 'borderline spectrum' of severe personality disorder (Barach, 1991; Benjamin & Benjamin, 1994). It is therefore not surprising that there is evidence of abnormal parental bonding between individuals with BPD and their parents. In general, BPD patients describe their relationships with their parents as problematic and dysfunctional (Zanarini & Fankenburg, 1997) and their parents as less caring and more overprotective than patients with other diagnoses (Torgersen & Alnaes, 1992).

Other studies have focused on the importance of loss and prolonged separation during childhood in the development of BPD (Zanarini & Frankenberg, 1997).

Within the biopsychosocial theory, the behavioural characteristics of BPD are conceptualized as the effects of emotion dysregulation, or the impulsive and maladaptive strategies learnt to attempt to return to an emotional baseline. For instance, parasuicidal behaviours are maladaptive but also highly successful emotion regulation strategies (Linehan, 1993a). It is common for individuals to report substantial relief from intense negative emotions, such as anxiety, following self-harm. Suicidal behaviour is also effective at eliciting help. It may lead to a hospital admission or additional care and attention from the environment. Self-harm behaviours can lead to a welcome distraction from intense emotional pain.

The inability to regulate emotional arousal also appears to interfere with the development and maintenance of a sense of self (Linehan, 1993a). Failure to validate an emotionally vulnerable child leads to them being unable to trust their inner world and an over reliance on external cues, to the extent that it interferes with identity development. The numbness associated with the inhibition of affect is often experienced as emptiness by the individual, adding to a feeling of not really existing and having no sense of self. It is not unusual for an individual with BPD to report that she feels empty inside and does not know who she is. Grotstein (1987) went as far as describing BPD as a pervasive disorder of both the regulation and experience of the self. Higgitt & Fonagy (1992) described the BPD individual as having a 'stable instability' of ego functioning.

A poor sense of self, a lack of capacity to self regulate painful emotions, such as anger, and poor problem solving skills make it understandable that individuals with BPD experience chaotic relationships and find it hard to maintain stable or healthy relationships. Instead, their relationships are characterised by extreme ups and downs. Even in a destructive or failing relationship the individual with BPD may find it impossible to walk away actually engaging in intense and frantic efforts to avoid being abandoned, including threatening and pleading actions.

Since Linehan first developed her theory a ninth diagnostic criterion has been added to DSM to account for the fact that individuals with BPD are also at times cognitively dysregulated. Brief periods of thought dysregulation, including depersonalisation, dissociation and delusions may be triggered by stressful situations and usually clear up when the stress is ameliorated. However, Linehan (1993a) addresses this, describing these phenomena as responses to overwhelming emotions and the unrelenting crises of individuals with BPD.

The table below illustrates Linehan's conceptualisation of the key behavioural features of BPD.

Table 1. The Behavioural Features of BPD (Linehan, 1993a, pg.10)

-
1. Emotional vulnerability: A pattern of pervasive difficulties in regulating negative emotions, including high sensitivity to negative emotional stimuli, high emotional intensity and slow return to emotional baseline, as well as awareness and experience of emotional vulnerability. May include a tendency to blame the social environment for unrealistic expectations and demands.
 2. Self-invalidation: Tendency to invalidate or fail to recognise one's own emotional responses, thoughts, beliefs and behaviours. Unrealistically high standards for and expectations of the self. May include intense shame, self-hate and self-directed anger.
 3. Unrelenting Crises: Pattern of frequent, stressful, negative environmental events, disruptions and roadblocks- some caused by the individuals dysfunctional lifestyle, others by an inadequate social milieu, and many by fate or chance.
 4. Inhibited grieving: Tendency to inhibit and over control negative emotional responses especially those associated with grief and loss, including sadness, anger, guilt, shame, anxiety and panic.
 5. Active passivity: Tendency to passive interpersonal problem solving style, involving failure to engage actively in solving of own life problems, often together with active attempts to solicit problem solving from others in the environment; learned helplessness, hopelessness.
 6. Apparent competence: tendency for the individual to appear deceptively more competent than she actually is; usually due to failure of competencies to generalise across expected moods, situations and time, and to failure to display adequate nonverbal cues of emotional distress.
-

1.3 The cognitive theory of BPD

The Cognitive theory of BPD fits neatly within the biopsychosocial theory of the disorder, providing an explanation for the role of the invalidating environment in the development of the negative thoughts and core beliefs of the individual with BPD.

The cognitive theory is based on the idea that at an early age children seek to make sense of their world and their experiences. To do this, they develop schemas or cognitive structures that organize incoming information. Schemas are the means by which they understand information and decide how to act upon it. The healthy person has stable, adaptive, relativistic, basic schemas or core beliefs ('I am a reasonably competent person;' 'my world has some danger but is predominantly a safe enough place for me') (Layden et al, 1993). Within the biopsychosocial theory of development, these beliefs can be regarded as developing within a secure and

validating environment. In contrast, personality disordered patients have extreme, negative, global and rigid beliefs ('I am incompetent;' 'my world is out of control;' 'other people are untrustworthy') (Beck et al, 1990), that are developed within an invalidating environment. These schemas are applied indiscriminately to all situations and any evidence to the contrary is ignored (Beck et al, 1990; Young & Lindemann 1992). BPD patients share a number of extremely rigid, negative beliefs with other patients with personality disorders ('I am defective;' 'I am vulnerable;' 'I am out of control;' 'I can't cope by myself;' 'I will be abandoned.')

(Layden et al, 1993). Zanarini et al (1998) identified three common beliefs in BPD ('I am endangered;'), ('I am like a small child;') and ('I feel uncared for'). The beliefs of individuals with personality disorders differ from those of individuals with Axis I disorders, in that they hold this view of themselves at all times. In keeping with the biopsychosocial model, Beck et al (1990) believed that these beliefs are partly genetically determined but significantly influenced by childhood events.

1.4 Attachment theory

Linehan's theories about the role of the invalidating environment seem to integrate well with Bowlby's work on attachment, providing an ethological perspective on why the invalidating environment can be so detrimental to the emotionally sensitive child.

Bowlby (1982) suggested that attachment plays a vital role across the lifespan of every individual. In his attachment theory, he postulates a universal human need to form close affectional bonds, for the sake of survival and normal development. These bonds are partly determined by the reciprocal nature of early relationships. He argued that caregiving adults respond to hard-wired behaviours of the infant e.g. proximity

seeking, smiling and clinging, which are designed to develop and strengthen the attachment relationship, by touching, holding and soothing (Fonagy, 2000). These responses reflect the primary function of early relationships, which is to enable the child to get their basic needs met and to feel secure, particularly in environments that induce fear (Bowlby, 1973). A developing child with a secure base can explore the world and new relationships confident that they will return to find attachment figures available and supportive when needed (Bowlby, 1988). Research has shown that children with a secure attachment relationship spend more time away, tolerating separation from their caregiver with less distress than children who lack a secure base who tend to have less curiosity and an inhibited willingness to explore (Ainsworth, 1989).

As well as fulfilling basic physical needs, the infant-caregiver relationship leads to the development of the child's ability to regulate their emotions. Bowlby (1973) assumed that on the basis of interactions between the infant and a caregiver, self-other representations develop (internal working models) which reflect the child's experience of sensitivity or lack of sensitivity on the part of the caregiver. The security of the bond between an infant and their primary caregiver reflects the child's confidence in their caregiver's capacity to understand their distress and to act on that understanding in a sensitive and appropriate manner (Ainsworth, Blehar, Waters & Wall, 1978). Secure infant behaviour is therefore based on the experience of sensitive and reassuring interactions that helped to restabilise the child's disorganised emotional responses. As a result, negative emotions are less threatening to the child and can be experienced as meaningful and communicative as the child develops the ability to manage stressful situations. As in the biopsychosocial theory, the

caregiver's responses to the child's communications are seen as strongly influencing their ability to regulate their emotions. Sroufe (1996) who said that the attachment system is the regulator of emotional experience, and that failure in the attachment system leads to emotional dysregulation, summed this up. A secure child can control affects and impulses and identify and express feelings (Karen, 1994; Sroufe, 1996). An insecurely attached child, who has experienced inconsistent or misattuned parenting, might have deficits in affect regulation, such as an inability to delay action, control attacks of rage or overwhelming panic. They may not even feel empathy for others, because this has not been modelled by caregivers (Allen, 1995; Brown, 1993; Schore, 1994). An adult who has internalised disturbed family attachment patterns, or experienced an invalidating environment, is therefore more vulnerable to psychological breakdown when confronted with a stressful situation.

In order to explore the security of the attachment relationship between a child and its mother, Ainsworth et al (1978) developed the 'Strange Situation Test,' during which an infant is briefly separated from their caregiver in an unfamiliar situation. The parent returns and the child's behaviour is observed. The authors found that a sensitively parented child seeks comfort from a caregiver following a brief separation (secure attachment). Since this test was first developed, secure attachment has been shown to predict the healthy development of a child in terms of the child's educational success, peer relationships, self-esteem and identity formation (Fonagy, 1999).

In contrast, insensitively parented one year olds tend to either avoid the parent after a brief period of separation (anxious-avoidant attachment) or refuse to be comforted on

the parent's return (anxious-resistant attachment). A fourth group of infants show signs of disorganised attachment. On reunion with their caregiver they might freeze, collapse, bang their heads, slap the caregiver, hide or try to escape, behaviours which are suggestive of extreme dysfunction in the attachment system (Fonagy, 1999). According to De Zulueta (1999), disorganised attachment, a mixture of avoidant and resistant behaviour, gives rise to a disorganised self and may lead to the features of adult BPD. A history of prolonged or repeated separation, intense marital conflict, severe neglect and physical or sexual abuse is associated with this attachment pattern (Fonagy, 2000).

In a positive attachment relationship, threat activates the attachment system and triggers the caregiving system of the adult. The system could be described as having a fault, when the threat (maltreatment) comes from the caregiver. Evidence is accumulating that caregivers of disorganised infants frequently respond to the infant's distress by hostile or helpless, dissociated or disorganised, frightened or frightening behaviour (Schuengel et al, 1999). This threat causes an over activation of the attachment system and the child may try to seek comfort from the individual who is maltreating them. The abuser is paradoxically the source of threat and of hope for rescue (Rajecki, Lamb & Obmascher, 1978). Consequently, these children come to experience their own arousal as a danger signal for abandonment. This is the dilemma believed to be at the heart of disorganised attachment.² Research shows that the disoriented, disorganised behaviour of the infant is replaced in the first 7 years of life by behavioural strategies that seek to gain control of the parent via punitive acts or age inappropriate care giving behaviour (Jacobovitz & Hazen, 1999).

² One patient described how when she was a child her mother would bite her until she cried in order to be able to offer her comfort afterwards.

Research into the attachment patterns of children has led to a natural progression of research into the attachment patterns of adults (Ainsworth, Blehar, Waters & Wall, 1978; Hazan & Shaver, 1987). Major longitudinal studies using the Adult Attachment Interview have shown a 68% to 75% correspondence between attachment classifications in infancy and in adulthood (Fonagy et al, 2000). (See below).

1.4.1 The Adult Attachment Interview (AAI), (George, Kaplan & Main, 1985).

Most of Bowlby's ideas on attachment theory were derived from observations of clinical populations, yet until the 1990's little work that applied research methods to studies of attachment theory had been carried out in clinical groups (Holmes, 1993). These studies were made possible by the AAI, which was developed to investigate the extent to which infant attachment could be predicted from parents' attachment style (George, Kaplan and Main, 1985). The AAI is a structured assessment instrument that utilises a semi-structured interview to elicit the individual's account of his or her childhood attachment and separation experiences, and their evaluation of how those experiences affect their current functioning. Several areas are probed, including the general quality of early child-caregiver relationships, about which the interviewer elicits specific memories. Interviews are audiotaped and then transcribed.

Individuals are classified on the AAI as secure, dismissing, preoccupied, unresolved/disorganised, or cannot classify. The unresolved or disorganised category is based on momentary lapses in attachment discourse, rather than stable attachment patterns, and is scored in addition to one of the other three categories. There is also a sub-classification of the preoccupied scale, which classifies the individual as fearfully preoccupied by trauma or loss.

1.4.2 The relationship of childhood attachment patterns to adult attachment patterns on the AAI.

Theories relating to childhood attachment patterns presume that children with anxious-avoidant attachment have had experiences in which their emotional arousal was not re-stabilised by their caregiver or where they were over aroused through intrusive parenting. It is thought that these children over regulate their affect and avoid situations that are likely to be distressing. Adults with an anxious-avoidant (dismissing) attachment style have been shown to deny memories by idealising or devaluing early attachment relationships.

In contrast, anxious-ambivalent children are thought to under-regulate their affect, heightening their expression of distress, possibly in an effort to elicit the desired response from a caregiver. They are thought to have a low threshold for threat and to become preoccupied with having contact with the caregiver but frustrated even when contact is available. Anxious-ambivalent (preoccupied) individuals tend to be confused in adulthood and angry or passive in relation to attachment figures.

Disorganised infants exhibit seemingly undirected behaviour, including wishing to escape an unfamiliar situation even when they are with a caregiver. The caregiver produces conflicting wishes in the child by being a source of fear and reassurance. As adults, disorganised individuals show confusion in their narratives concerning childhood trauma or recent loss (Fonagy, 2000).

1.4.3 An attachment theory explanation of BPD

Although not derived for individuals with BPD, Bowlby's attachment theory has ready application to them and contributes to the understanding of the defence

mechanisms used by individuals with BPD, such as splitting and projection, which interfere with the therapeutic relationship.

Conceptually, attachment styles and PDs overlap to some degree, in that they both describe relatively enduring patterns of inner experience and behaviour (although attachment styles relate specifically to behaviour and experience within relationships). Both insecure attachment and PD can also lead to distress and impairment (Dozier, Stovall & Albus, 1999) and have been linked to adverse childhood experience (Cassidy, 2000). It is also theorised that both may have evolutionary roots as strategies that evolved to maximise survival. The purpose of the attachment relationship is to ensure that the child gets their needs met in order to survive and develop emotionally. A personality disorder may be the result of a genetically vulnerable child trying to survive and get their needs met as best they can within an invalidating environment (Millon, 1990; Chisolm, 1996).

As outlined above, attachment theorists seek to explain BPD psychopathology as the result of severe disturbances in early caregiver-child relationships, although as in the biopsychosocial theory, attachment in and of itself is recognised as an insufficient explanation for BPD and biological predisposition is recognised as a significant factor (Fonagy, 2000). Using Bowlby's ethological perspective, BPD is conceived of, as "a condition of profound insecure attachment with extreme oscillations between attachment and detachment" (Sable, 1997, pg. 173) e.g. a longing for secure bonds alternating with a dread and avoidance of such closeness because of the danger that it can present. There is a need for another but a fear of being attached to anyone in case of rejection and abandonment and the anxiety and anger to which that would lead

(Bowlby, 1979). Within this theory, the conflict between attachment and exploration accounts for the vacillating moods of the individual with BPD. At mild to moderate levels separation anxiety is considered to be an adaptive response to a feared disruption of the attachment relationship, but maladaptive at extreme levels. In the same vein, mild to moderate anger is an adaptive reproach to the caregiver in response to the frustration felt when they are perceived to be endangering the bond. It is also viewed as an appropriate deterrent to future similar behaviour. With an unresponsive or inappropriately responsive caregiver, these feelings will not be soothed but heightened and reach extreme and inappropriate levels.

Fonagy (1991) argued that disrupted attachment in childhood not only leads to an insecure attachment pattern in significant relationships in adulthood, but also to a disruption of the individual's capacity to depict feelings and thoughts in themselves and others (mentalisation). Fonagy (2000) outlined his concept of reflective function or mentalisation. He tested parents' abilities to tease out a child's motivation and recognise it as different from adults'. He found that parental reflectiveness ratings made prior to a child's birth were powerful predictors of a child's attachment style. He concluded that the capacity for reflective awareness in a child's caregiver increases the likelihood of a child's secure attachment. "My caregiver thinks of me as thinking and therefore I exist as a thinker," Fonagy (2000, pg. 1129). This theory is important in relation to understanding BPD as the author proposes that: 1) Individuals who experience early trauma may inhibit their capacity for mentalisation, in order not to consider their caregiver's wish to harm them; and 2) some characteristics of severe BPD may have their roots in the developmental pathology associated with this inhibition.

Unable to develop a sense of self, because the internal world remains unlabelled or inappropriately labelled by the caregiver, the child is forced to experience itself externally. They are constantly seeking an external object that can be internalised and tidy up their internal chaos. In individuals with a disorganised attachment style, this ‘other’ is often persecutory and once internalised is constantly being ‘split off’³ from the self and ‘projected’⁴ on to others, in order to protect the individual from being subsumed entirely.

The table below illustrates Fonagy et al’s conceptualisation of BPD symptomatology.

³ Splitting is the concept, derived from psychoanalytic theory, of dividing an object into ‘good’ and ‘bad.’ This avoids the conflict inherent in ambivalent feelings. For instance, a child might split the mother into a ‘bad’ object who she hates and who delivers punishment and frustrates her desires and a ‘good’ object who is loved and revered.

Table 2. Fonagy et al's (2000) model of BPD symptomatology.

-
1. The unstable sense of self is viewed as the result of the inability to think about the thoughts, feelings, wishes, motivations and behaviours of others, which provide the internal working models for the development of self. It is only by the primitive defenses of splitting and projection that the individual can find a temporary self, at the cost of a genuine relationship. For instance, if you blame those close to you for your own short comings or attribute your more difficult or unacceptable feelings to others, then a relationship is likely to be doomed to failure.
 2. Impulsivity is seen as the result of a lack of an internal representation of the individuals' own or other's emotional states which results in emotion dysregulation. With no understanding of one's own or other's motivations for emotions or behaviour, they cannot be perceived of as intentional and are therefore changeable only through physical action.
 3. Emotional instability and irritability are viewed as derived from an inability to develop different hypotheses about others' behaviour, which would enable the individual to understand their current behaviour and predict their future behaviour. This inability to think about alternative explanations often leads to the conclusion that the behaviour of others is unexpected and threatening and any attempt to conclude otherwise is perceived of as an attempt to drive the BPD individual insane.
 4. Suicidality is thought to represent the fantasized destruction of the alien other within the self and the aim of suicide attempts is believed to frequently be an attempt at preventing abandonment when another individual appears to be existing as an independent mentalising entity. As a child, the experience of the individual with BPD may have been that only something extreme would bring about changes in their caregiver's behaviour and that their caregivers used coercive measures to influence the BPD individual's behaviour when they were a child. According to Fonagy (2000), suicide and self-harm are common manifestations of disorganised attachment in women.
 5. Splitting is seen as a defense that enables the individual to create mentalised images of the other, however these are inaccurate and oversimplified as the individual cannot hold the contradictory attitudes of the abuser and so splits the representation into two, thereby including an idealised and a persecutory identity. The lack of integration of these partial representations is an obstacle in communicating with patients with BPD.
 6. The emptiness commonly reported by the BPD individual is viewed as the result of a failure to experience the self and the shallowness with which they are able to experience others.
-

1.4.4 Research into attachment and BPD

Past attempts at linking attachment work with theories of BPD psychopathology have stressed the common characteristics shared by the preoccupied attached and the individual with BPD e.g. an intolerance of aloneness and terror of abandonment (Gunderson, 1996). Others, have additionally focused on the similarities between disorganised attachment and BPD (De Zulueta, 1999; Fonagy, 2000). However, the nature of the overlap between personality disorder and attachment styles remains

⁴ Projection involves viewing a mental image as reality and the externalisation of unwanted feelings by their unconscious transfer onto someone else.

unclear (Meyer et al, 2001). Sable (1997) suggested that the research into personality disorders indicates that they should be understood as the outcome of disturbances in the organisation of attachment behaviour, along a continuum of secure versus insecure. BPD functioning would fall toward the extreme of insecure, with more disorganisation, rigid defenses and traumatic histories (Adam et al, 1995).

There is also empirical evidence of the association between attachment styles and PD. Research by Meyer et al (2001) demonstrated an inverse correlation between security of attachment and PD. At least seven studies have demonstrated that patients with BPD have extremely insecure attachment relationships (mostly preoccupied) characterised by alternating fear of involvement and intense neediness (e.g. Bartholomew et al, 2001; Patrick et al, 1994; Stalker & Davies, 1995).

Patrick et al (1994) compared 12 patients who met 7 out of 8 DSM III criteria for BPD, with 12 dysthymic patients who met no BPD criteria. Despite the small sample size, they found that all 12 Individuals with BPD were preoccupied on the AAI and 9 of the 12 were unresolved (disorganised), with respect to loss, trauma and abuse compared to 2 in the dysthymic group.

Salzman et al (1997) sought to establish whether disturbed attachment to the mother was more strongly related to BPD than to abuse in a non-clinical population. They reported data that attachment had a more powerful statistical relationship to BPD than a history of childhood abuse. In their first study they found that all participants meeting criteria for BPD were classified as ambivalently attached. However in their

second study more BPD participants were classified as avoidant (Salzman et al, 1997), indicating a lack of stability in their research findings.

Research by Nickell et al (2002) controlled for both Axis I and Axis II pathology and found that BPD features in a student population were significantly associated with preoccupied attachment, beyond what could be accounted for by childhood loss or abuse. Interestingly, when they did not control for other personality disorders, avoidant attachment also emerged as a significant predictor of BPD features and childhood sexual abuse appeared as a significant unique predictor. (Indicating, that the study by Salzman et al (1997) might have been confounded by comorbidity). As a result of these findings, they argue that parental bonding patterns and attachment styles show a unique relationship with borderline features and should be considered in aetiological models of BPD. However, they used a non-clinical sample and only 2% of their participants actually met diagnostic criteria for BPD. It is unclear if they would have found the same results if this research were carried out on a BPD sample.

Ludolph et al (1990) found that a history of disrupted attachment, rejection, abuse and chaotic family environment significantly distinguished between adolescent girls with BPD, and psychiatric controls. However this research can be criticised on the basis that BPD cannot be diagnosed before early adulthood and because no data were presented indicating the relative strength of these associations (e.g. the overlap among predictors).

In a study by Fonagy et al (1996), seventy five percent of individuals diagnosed with BPD were also classified as preoccupied on the AAI (N=36) and 89% of the BPD

group were classified as disorganised. They found overwhelming support for the association of psychiatric disorder with unresolved difficult early relationships, which is in line with the predictions of attachment theory (Bowlby, 1980, 1988). In particular, the most specific relationship found in the study was between BPD diagnoses and attachment classification. They also found that the AAI predicted treatment response, which needs following up with longitudinal research.

In studies of AAI narratives of patients with BPD, the classification of preoccupied attachment has been most frequently assigned (Fonagy, 2000). It seems that the preoccupied pattern of attachment can alternate unpredictably with a disorganised attachment pattern (Gunderson, 1996). This displays itself as the denial of dependent needs, the apparent absence of separation anxiety and reluctance or fearfulness about becoming attached.

In summary, research into attachment and BPD appears to demonstrate a clear relationship between the two concepts, even when controlling for Axis I and other Axis II disorders. However, some of the studies have used non-clinical participants with features of BPD and most of the research has been carried out on patients who meet DSM III criteria for BPD. It will be interesting to see if the relationship between BPD and attachment is affected when the ninth criterion is included. In addition, all these studies have used either the AAI or a mixture of self-report measures of attachment. But, evidence is accumulating that these may not be the best methods of identifying attachment styles (see below).

1.4.5 The measurement of attachment styles.

Whilst the AAI is the gold standard for measuring adult attachment, Fonagy et al (2002) suggest that it has a number of limitations:

- 1) The AAI essentially examines 'infant attachment grown up', rather than assessing the attachment relationship with each parent, as can be done in infancy (Ainsworth et al, 1978).
- 2) The AAI is extremely time consuming. The semi-structured interview takes between one and two hours to complete and additional time, expense and extensive training, to transcribe.
- 3) The AAI classifies individuals as secure, dismissing, preoccupied (with the subclassification of unresolved/disorganised) or cannot classify. A substantial number of cases are coded as cannot classify.
- 4) With the introduction of questionnaire measurements of attachment, there has been a move away from categorical assessment towards the dimensional assessment of attachment and the assessment of each attachment style on a continuum.
- 5) The applicability of the measure to clinical populations has not been demonstrated in rigorous studies (Dozier et al, 1999).
- 6) The person rather than the relationship is classified despite the widely held assumption that attachment is not a personality trait but a characteristic of a relationship (Ainsworth et al, 1978).

Questionnaire methods of measuring Adult Attachment are also mostly designed to yield a single attachment classification, rather than a characteristic of a particular relationship, at a particular time, and are subject to bias (Allen et al, 2001). The

benefit of using a Q-sort methodology, that requires participants to place items in rank ordered groupings with a fixed distribution, rather than a Likert scale, is that it reduces the impact of response bias (such as acquiescence).

The Attachment Q-Sort was designed as a measure that could: distinguish attachment relationships, with different caregivers; directly assess the three classic attachment patterns of secure, dismissing and preoccupied; and be consistent with Fralley and Waller's (1998) finding that dimensional models are more suitable than typological or categorical measures of attachment. In addition, the Attachment Q-sort distinguishes between attachment and non-attachment aspects of the relationship being examined, so that secure attachment is not confounded by global positive valence, e.g. liking, and insecure attachment with global negative valence, e.g. disliking.

This project will use the Attachment Q-Sort (Fonagy et al, 2002) to examine the attachment relationship of individuals with BPD to their primary caregiver.

1.5 Coping

So far in this literature review, the biopsychosocial theory and attachment theories of BPD have been discussed. Central to both these theories has been the idea that emotion dysregulation is at the heart of BPD. It is hypothesised that this dysregulation leads to the poor coping that is characteristic of the individual with BPD. The following section of this review therefore examines the literature on coping and coping measures, the literature on the relationship between coping and attachment, and the relationship between coping and BPD.

Coping has been shown to play an important role in physical and psychological wellbeing, and the maintenance of mental health under conditions of stress. In early discussions, Freud (1933) viewed coping as largely unconscious processes used to manage threat or anxiety and believed that this was done through defense mechanisms (e.g. repression, rationalisation, splitting and projection). These defenses are still recognised as important. For instance, Vaillant & Drake (1985) linked personality disorders with immature defense mechanisms such as splitting, projection and acting out. However, since the late 1970s and early 1980s, coping has primarily been conceptualised within cognitive behavioural models. It is viewed as a response to external stressful or negative events (Folkman & Lazarus, 1980; 1988; McCrae, 1984) and has been broadly defined as conscious “overt and covert behaviours that are taken to reduce or eliminate psychological distress or stressful conditions.” (Fleishman, 1984, pg. 229). A stressful situation can be defined as one which is perceived to be physically or psychologically threatening to the individual and which therefore induces anxiety, perhaps because the internal or external demands are appraised as exceeding the individual’s coping resources.

In certain situations, such as emergencies, particular coping behaviours are more likely to be effective and necessary than others (e.g. telephoning an ambulance). However, in most stressful situations a variety of coping responses are feasible and possible. Research has demonstrated that individual preferences play an important role in determining what coping strategies an individual will choose to employ (Fleishman, 1984; Miller & Brody, 1988). This preference, or typical manner of confronting a stressful situation is referred to in the literature as an individual's 'coping style,' meaning that they have a characteristic manner of confronting a stressful situation and dealing with it (Folkman & Lazarus, 1985). Coping styles are important because they are thought to mediate between antecedent stressful events and the consequences of stress, such as anxiety, depression, psychological distress and somatic complaints (Billings & Moos, 1981; Endler & Parker, 1990). This is because a situation may be exacerbated or ameliorated depending on the style of coping employed.

Folkman & Lazarus (1984) derived the two most commonly recognised coping styles from what they proposed to be the two major functions of coping: 1) The regulation of distressing emotions (emotion focused coping) and 2) The alteration of the problem causing distress (problem focused coping). Both of these types of coping parallel the dimensions or styles of coping identified by others (Billings & Moos, 1984; Endler & Parker, 1990; Pearlin & Schooler, 1978).

Emotion focused coping strategies are emotional reactions aimed at reducing distress. However, this is not always successfully achieved (Endler & Parker, 1999). While becoming temporarily upset in order to express and work through emotions might be

beneficial, some emotion focused strategies (including; blaming oneself for being too emotional, and getting very angry) may actually increase an individual's emotional distress, in the long-run, especially if they are an individual's characteristic responses to stress. Blaming oneself for being too emotional may lead to attempts to suppress emotions, which can result in 'explosive outbursts' and self-hatred. Becoming very angry might lead to that anger being taken out on the self, or others. In other words, emotion focused coping can lead to distress escalation and the creation of more stressful situations.

In contrast to emotion focused coping, problem focused coping is task oriented, meaning that the individual attempts to improve the situation, where possible, by focusing on the task or problem that is causing the stress. This might be done through attempting to alter the situation or cognitively restructuring the interpretation of the situation or problem.

Endler & Parker (1990) suggested that social support need not be treated as a specific coping dimension, but as a resource, or moderator, of coping activity across coping styles. Where problem focused coping is concerned, social support is task oriented and related to seeking information or practical help. With respect to emotion focused coping strategies, social support provides an opportunity for emotion regulation through communication.

On the basis of empirical research by Endler & Parker (1994), a third basic coping strategy is suggested – avoidance coping. This can also be either person or task oriented. They argue that one can avoid a stressful situation by seeking out other people (social diversion) or by engaging in a substitute task (distraction) the extreme

of which might be to escape emotions through consuming alcohol or taking drugs. In other words it involves activities and cognitive changes aimed at avoiding the stressful situation or emotions (Endler & Parker, 1999).

Building on the cognitive transactional theory of stress and coping developed by Lazarus & Folkman (1984), Endler (1988; 1997) developed a common sense interaction model of anxiety stress and coping (See figure 1, pg. 34). In this process-oriented model, person variables are viewed as interacting with one another and with situation variables, which themselves interact with each other. This interaction leads to a perception of threat, which can in turn affect both person and situational variables and lead to changes in state anxiety. A reaction to the anxiety is triggered, be it behavioural, physical, cognitive or physiological. A continuous feedback loop is then set up affecting person variables and the stressful situation. For instance, if an individual utilises a maladaptive coping strategy, they may make the situation more stressful and therefore become increasingly anxious or distressed, whereas if they use a problem focused coping strategy it may lead to a reduction in stress.

This model led to the development of the Coping Inventory for Stressful Situations (CISS), a self report coping measure designed to test the model and rectify problems with reliability and validity in other widely used coping measures (Endler & Parker, 1990). (See chapter 2).

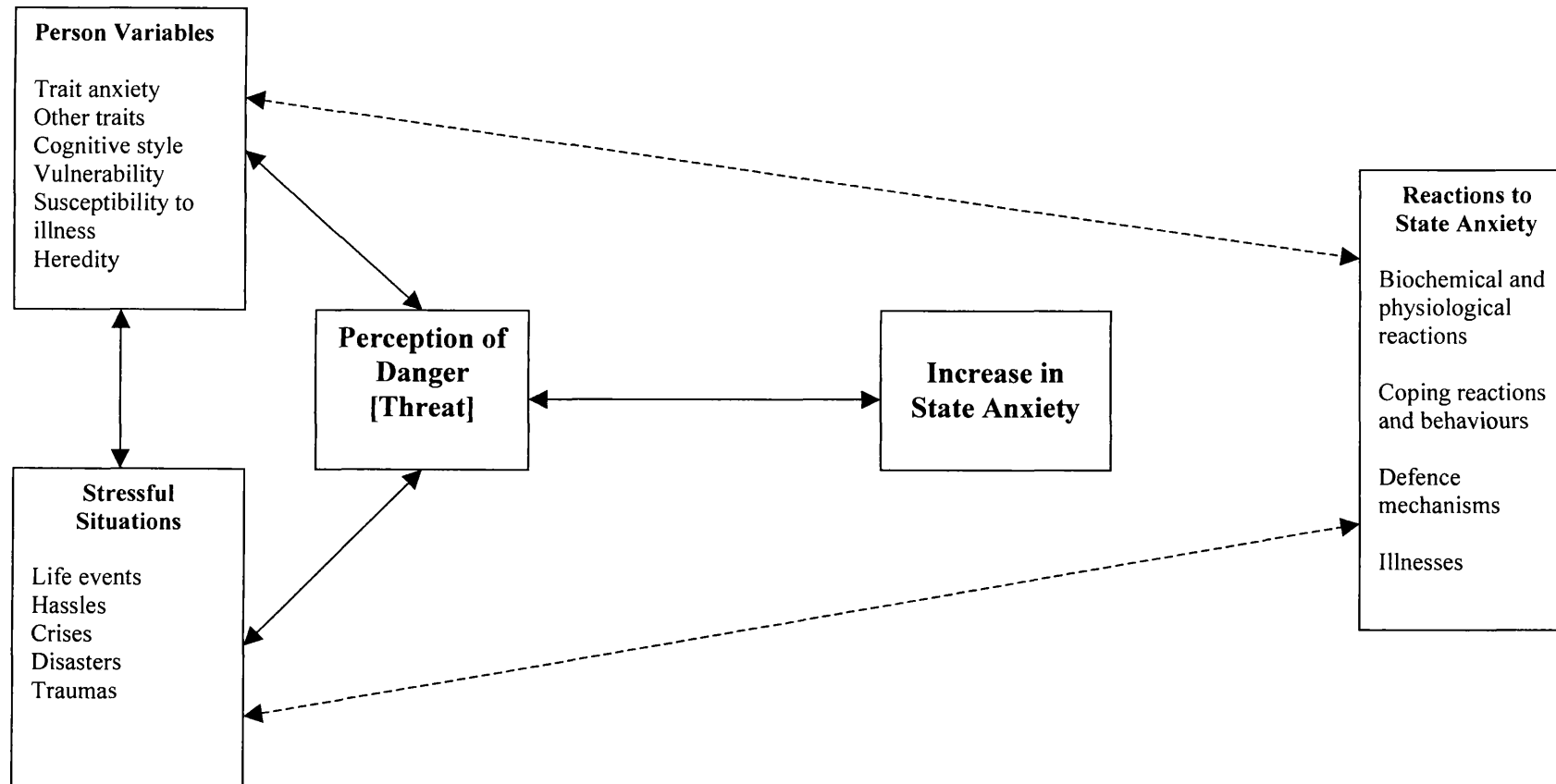


Figure 1. Interaction Model of Stress, Anxiety and Coping (Endler, 1988; 1997, pg. 31)

1.5.1 The measurement of coping

Recent research into the measurement of coping has focused on self-report measures. The majority of measures that have been developed, attempt to assess the general coping strategies or styles of individuals (interindividual or trait coping). However, almost all of the coping scales suffer from the critical inadequacies of poor construct validity and poor test-retest reliability (Parker, Endler and Bagby, 1994).

Lazarus and Folkman (1985) developed two coping scales that have been widely used in coping research; The Ways of Coping Checklist (WCC) and the Ways of Coping Questionnaire (WCQ). Despite being widely used, investigators have frequently found a different number of factors (scales), depending on the sample (Tennen & Herzberger, 1985). An additional problem with the WCQ is that researchers who have used the measure have added or dropped coping items on the basis of the hypothesis under investigation, or the population being studied. This makes it very difficult to compare studies. Endler & Parker (1999) argue that there are few other research areas in psychology where such an approach to a 'standardised test' would be acceptable methodologically.

Carver, Scheier & Weintraub (1989) criticised the WCQ and similar coping instruments on the basis that conceptually distinct coping behaviours were combined in a single item. In order to attempt to rectify this situation, they developed a 52 item coping scale called the COPE. Internal reliabilities for the COPE subscales ranged from a low of .45 to a high of .92. Given the large number of factors derived from the initial factor analysis and the low to moderate alpha coefficients for many of the

subscales, the factor structure of the COPE needs further investigation (Endler & Parker, 1999).

The CISS was developed on both a logical and empirical basis because: 1) There was a lack of consensus among researchers in the field of coping; 2) of the psychometric weakness of many existing scales e.g. relatively low reliabilities, unstable and unsubstantiated factor structure and a lack of empirical support; and 3) of the need for a reliable and valid coping measure to test the interaction model of stress, anxiety and coping (Endler, 1998; 1997). A number of theoretical issues were addressed in the design of this measure including the addition of a third coping style – avoidance coping.

The CISS has been selected for use in this study due to its reliability and validity (See chapter 2) and because it enables the investigation of the role of avoidance coping in BPD.

1.5.2 Attachment and coping

Individual differences in attachment style may have important implications for personal well being and emotional adaptation because they influence the way that individuals regulate their emotions and the ways in which they cope with stress (Carnelley et al, 1994). Several studies indicate that adults with different attachment styles differ in the way that they cope with stressful events (Simpson et al, 1992; Mikulincer et al, 1993).

Onigbene & Collins (1998), examined attachment styles, coping and social support in a normal population. They found that secure individuals perceived more available

support from friends and family and sought more social support in response to stress than individuals with other attachment styles. Whilst individuals with a preoccupied attachment style also sought social support in response to stress, they had a tendency to use escape-avoidance coping strategies. Avoidant adults were less likely to seek out social support or to discuss their problems with another person, preferring to take the opposite path in some instances and distance themselves from friends and family. Similar results were found in a sample of Israeli college students when their attachment style was related to coping following a specific event (the Iraqi scud missile attacks) during the Gulf War (Mikulincer et al, 1993).

Onigbene & Collins (1998) concluded that secure and preoccupied individuals view close relationships as important and desirable, whilst avoidant individuals view them as risky. They hypothesised that this is the result of internal working models, which come to form the basis of the individual's view of themselves and others and which organise cognitions, affects, behaviours and reactions to distress. According to Mikulincer et al (1993), the cognitive schemata related to an individual's stress response may influence the ways in which they go on to cope with stress in later life and their emotional adjustment.

Children whose attachment figures are consistently responsive come to believe that others are trustworthy and reliable and that the self is valuable and worthy of love and support. As a result, adults with secure attachment histories should be equipped to manage stressful situations, relying both on their belief that they can control their environment (through problem focused coping strategies and emotion regulation) and on their faith that others will be available to help, if needed. Individuals whose

attachment figures are either inconsistently responsive or consistently unresponsive may develop more pessimistic models of themselves, and or others, seeing life's adversities as threatening, irreversible and uncontrollable. Onigbene & Collins (1998) found that avoidant individuals tend to have low expectations of themselves and others, whilst preoccupied individuals have a negative model of themselves but a positive model of others. This theory is supported by evidence from a literature review on attachment and affect regulation by Cassidy (1994). Cassidy concluded that avoidant attachment is associated with affect inhibition or minimisation and isolating oneself and that preoccupied attachment is associated with hypervigilance to sources of distress, affect enhancement and frantic efforts to avoid abandonment. This conclusion makes logical sense. If an individual has no faith in themselves or others, they are likely to want to hide their distress from others and avoid it themselves. An individual with faith in others but not themselves is more likely to see it as a disaster to be left to cope without support and may desperately display their distress in order to find another individual to rescue them or solve their problems for them.

Hazan and Shavers' (1987) study of adult romantic relationships also supports this theory. They found that adults who were securely attached tended to have relationships in which intimacy, closeness, supportiveness and trust were key features. Individuals who were avoidantly attached had relationships characterized by mistrust, fear of intimacy and a difficulty depending on others. Those with a preoccupied attachment style, had relationships characterized by emotional instability, fear of abandonment and jealousy.

Whilst the securely attached are able to seek help and try to actively find solutions to their problems (problem or task focused coping), insecurely attached individuals lack the personal and interpersonal resources to regulate their emotions and cope effectively (Kobak & Sceery, 1988). Instead, they attempt to alleviate their distress through the use of maladaptive coping strategies. Mikulincer et al, (1993) found that the three attachment styles did not differ in the degree of problem focused coping that they used. Secure individuals sought more support, the preoccupied group used more emotion focused coping and the avoidant group used more distancing coping strategies.

Both avoidant and ambivalent individuals have been shown to be more hostile than securely attached individuals (Kobak & Sceery, 1988). Both attachment styles are also related to: loneliness (Hazan & Shaver, 1987), physical symptoms (Hazan & Shaver, 1990), alcohol consumption, self-medicating, indiscriminate sexual behaviour, eating disorders (Bartholemew, 1990; Brennan & Shaver, 1995), shame, anger and a fear of negative evaluation (Wagner & Tangney, 1991).

To summarise, the association between attachment style, affect regulation and coping means that individuals with secure attachments are more tolerant of stressful events and allow access to unpleasant emotions without being overwhelmed by the resulting distress (Kobak & Sceery, 1988, Mikulincer & Florian, 1998, Shaver & Hazan, 1993, Troisi et al 2001). Positive early attachment experiences may buffer emotional distress and teach people that although difficult, problems in life are manageable. Individuals who are insecurely attached have had attachment experiences that have left them unable to trust either themselves or others, leading to them failing to regulate their emotions without resorting to maladaptive coping strategies that risk

leading to further emotion dysregulation and crises. Poor attachment relationships in childhood therefore place individuals at risk of poor adaptational outcomes e.g. depression, decreased life satisfaction and poor interpersonal functioning which are likely to have long-term negative effects on psychological and physical well being.

1.5.3 Research into coping and mental illness

The recent proliferation of research on coping is indicative of the important role of coping styles in mediating between antecedent stressful events and consequences such as anxiety, depression, psychological distress and somatic complaints (Coyne, Aldwin & Lazarus, 1981). However, although widely investigated, studies of coping to date have mainly been restricted to college students and individuals with Axis I disorders.

Research has demonstrated that anxious and depressed individuals tend to depend more upon avoidance coping strategies for regulating emotional distress including escapist fantasies and wishful thinking (Billings, Cronkite & Moos, 1983; Parker & Brown, 1982; Vollrath & Angst, 1993). Longitudinal studies have also shown that avoidance coping strategies increase future symptoms of anxiety and depression (Felton & Revenson, 1984; Holahan & Moos, 1986). The inverse relationship also holds true. Problem focused coping strategies are negatively related to psychological symptoms and distress (Aldwin & Revenson, 1987; Billings & Moos, 1981; Bolger, 1990). Poor problem focused coping has been shown among patients with panic and depression (Roy-Byrne et al, 1992). In addition, a tendency towards avoidance coping was found in a mixed group of criminal offenders and anger-dyscontrol patients. Participants utilised little social support or problem focused coping (Vitaliano, et al, 1990).

Overall, the research into coping and mental illness indicates a strong association between mental health problems and avoidance coping.

1.5.4 Coping in BPD

There is little evidence in the literature of research into coping in BPD, yet inflexible and dysfunctional coping strategies are considered to be among the core features of personality disorders. Behaviour deficits in coping are part of the criteria distinguishing PD from normal personality - rigidity in choosing a coping strategy, and emotional lability under stress. Research undertaken, has predominantly focused on the impact of a personality disorder on Axis I disorders and has shown that problem focused coping is reduced in the presence of a personality disorder, among patients with panic and depression (Roy-Byrne et al, 1992). Similarly, reduced problem focused coping and excess avoidance coping was found among substance abusers when BPD was simultaneously present (Kruegelbach et al, 1993).

In 1994, a group of researchers began to look specifically at coping in PDs. Vollrath et al (1994; 1995; 1996) found that patients with disordered personalities demonstrated a pattern of dysfunctional coping in different areas of their lives. This research indicated that individuals with BPD tended to make little use of problem focused coping strategies aimed at changing a situation for the better or social support. They found a tendency for behavioural passivity, mental detachment from the individual's goals, dwelling on feelings and then having an uncontrolled outburst, and the use of drugs and alcohol to reduce emotional distress. They also found that some dysfunctional coping strategies predicted an aggravation of the personality disorder. Passivity and detachment in stressful situations, which may be helpful in

surviving a short-term unpleasant event, such as surgery, are maladaptive in the long run. As stressful situations fail to be addressed, they continue to be sources of stress and renewed distress. Personal goals are abandoned with each new challenge, resulting in low self-esteem. Social resources are depleted because family and friends repeatedly encounter withdrawal and expressions of anger (Folkman & Lazarus, 1988; Kessler, Price & Wortman, 1985).

Self-harm and suicide are perhaps the coping strategies most associated with BPD, and unsurprisingly the utilisation of other maladaptive coping strategies has been shown to be predictive of self-damaging and suicidal behaviours (Maiuro et al, 1990; Kehrer & Linehan, 1996). Research by Rietdijk et al (2001) indicated that a poor ability to self soothe (e.g. by thinking reassuring thoughts) is highly predictive of parasuicidal behaviours.

Research by (Vollrath, Alnaes & Torgersen, 1995) indicated that coping styles predict change in personality disorders, irrespective of sex and age. The implications of this are that changing coping behaviours will bring about a change in the number of PD diagnostic criteria met by an individual. Some cognitive behavioural treatment programmes that show promising results in the treatment of individuals with severe mental illness report teaching participants to engage in health improvement behaviours (Andres et al, 2000) or proactive coping strategies.

Findings to date, appear to provide initial support for the theoretical view that maladaptive coping strategies are a significant feature of personality disorders, including BPD (Beck, Freeman & Associates, 1990).

Several measures of coping have been developed (e.g. the WCQ, the COPE and the CISS). However, it appears that none of the existing measures include items which sufficiently reflect the often extreme responses to stress of individuals with BPD (e.g. self-harm, putting oneself in a dangerous situation, harm to others, dissociation). These reactions to stress are widely viewed as characteristic of individuals with BPD. In addition they are seen as impacting on the quality of life of individuals with BPD and on their ability to manage the interpersonal interactions involved in any treatment approach. As a result, this study aims to begin the process of developing a questionnaire that specifically examines coping in individuals with BPD. Once developed, it is hoped that this questionnaire will also provide a useful evaluation tool in the treatment of individuals with BPD. The BBCQ could provide mental health professionals with information regarding the coping strategies that individuals with BPD utilise. Thus, it could also be used to tailor individual treatment plans and as a method of tracking changes throughout treatment.

1.6 Treatment approaches to BPD.

There are a number of different therapeutic approaches to working with individuals with BPD that focus on the attachment relationship, teaching coping strategies, or both. Below is a brief description of some of those with the most promising outcome data.

Dialectical Behaviour Therapy (DBT) is an integrative package of intensive behavioural treatment, developed by Linehan (1993a), based on the biopsychosocial theory of BPD. Therapists aim to teach the individual to modulate emotional extremes, to trust and validate their own emotions, thoughts and activities and to

reduce maladaptive mood dependent behaviours. The focus is on skills training in four main areas (mindfulness, emotion regulation, managing interpersonal situations and tolerating distress). Through individual therapy and skills training the therapist aims to find a dialectical balance between accepting things as they are and the need for positive change.

Various cognitive approaches aim to use Socratic questioning in order to identify and work on patients' early maladaptive schemas, cognitive distortions, and their relationship to emotional responses and behaviours, in a collaborative and proactive fashion (Perris 1994; Young & Lindemann, 1992; Safran & McMain, 1992; Davidson & Tyrer, 1996)

Psychoanalytically Oriented Partial Hospitalisation (POPH) (Bateman and Fonagy, 1999) is an approach that views BPD as a disorder of attachment, separation tolerance and reflective functioning. Treatment consists of individual and group psychoanalytic psychotherapy and group expressive therapy.

Cognitive Analytic Therapy (CAT) shares ideas and methods with Psychoanalysis and Cognitive Therapy. It also has some unique features, such as the focus on reciprocal roles and an early joint reformulation of a patient's problems, which is used to explore the negative cycles of behaviour and negative patterns of interaction that the patient repeats. Ryle (1996) argues that CAT serves to contain destructiveness and create a working alliance whilst teaching self-reflection.

Both DBT and POPH have been shown to produce good outcomes in randomised control trials on a number of measures, including frequency of suicidal behaviour, number of days in hospital and social adjustment. CAT and Cognitive therapy have been shown to have good naturalistic outcome data (Bateman & Fonagy, 1999; Perry et al, 1999; Roth & Fonagy, 1996).

According to Fonagy (2000), the core of psychological therapy with individuals with severe personality disorder is the enhancement of reflective processes. The therapist helps the patient to understand and label emotions and to rekindle mentalising. He claims that Linehan's DBT protocol, psychoanalytic psychotherapy and Ryle's cognitive analytic therapy, all aim to: 1) Establish an attachment relationship with the patient; 2) create an interpersonal context where the understanding of mental states (ones own and others) becomes a focus; and 3) recreate a situation in which the self is recognised as intentional and real by the therapist, in order for the patient to perceive this recognition and internalise it.

It is possible that the focus on the therapeutic relationship, on labeling the individuals' emotional world, and on fostering new and adaptive coping strategies, of some of these therapeutic approaches (which have differing emphases on each) might account for their effectiveness in bringing about change in the individual with BPD.

1.7 Summary

To summarise, although insecure attachment and dysfunctional coping are both regarded as being significant in the development and maintenance of BPD, by theorists and researchers, no one has yet examined the relationship between these two concepts in the disorder. There is a body of research suggesting a relationship

between attachment and BPD. In research to date individuals with BPD have predominantly been classified as having a preoccupied attachment style on a variety of different attachment measures, and the sub-classification of disorganised attachment has been most commonly assigned using the AAI (Fonagy et al, 1996; Patrick, 1994).

Deficits in coping are generally agreed to be among the core features of BPD. However, until recently there has been little research into the coping styles of individuals with BPD and the relationship between coping and BPD remains unclear. Research appears to support the hypothesis that coping strategies are significant in terms of improvement or deterioration in the disorder (Vollrath et al, 1995) and that Personality Disorders may be distinguishable in terms of their coping style (Vollrath et al, 1996). Individuals with BPD are thought to use few task or problem focused coping strategies and a predominance of emotion focused and dysfunctional coping strategies, when they encounter stressful situations (Vollrath et al, 1994).

The relationship between attachment and coping in BPD could be conceptualised within the biopsychosocial, theory of BPD (Linehan, 1993a). Within this theory, BPD is viewed as the result of an interaction between biological predisposition, personality and a relationship with one or more caregivers in which the child's emotional and or physical needs are not met (the invalidating environment). In support of this conceptualization, there is a substantial body of literature on the relationship between attachment, misattuned parenting, childhood abuse and BPD (Herman, 1986; Ogata et al, 1990; Zanarini & Frankenberg, 1997). The combination of these factors is thought to lead to the child failing to learn how to regulate their emotions. This emotion dysregulation may be at the heart of why individuals with BPD fail to cope with

stressful situations in a way that enables them to function appropriately in everyday life. Instead of learning to problem solve in a functioning environment, the child learns coping strategies that enable them to survive or escape from the invalidating environment as best they can. Fonagy (2000) hypothesizes that one of the ways in which the child does this is to avoid thinking about others' feelings and motivations, in order not to have to consider their caregivers wish to harm them.

This research projects aims to improve the understanding of the relationship between attachment and coping in BPD, in order to increase knowledge about the disorder and of appropriate treatment techniques.

1.8 Research questions and hypotheses of the study.

This research set out to answer the research question:

Is there a relationship between attachment and coping in BPD?

A review of self-report measures of coping and of the literature on BPD led the researcher to conclude that, in order to address this question, it was necessary to develop a measure that identified the specific coping strategies used by individuals with the disorder. Therefore, in order to answer the main research question, the first question that needed to be addressed was:

- 1) *Does a new scale developed to measure coping in BPD (the Barnett Borderline Coping Questionnaire, BBCQ) measure something qualitatively different than standard measures of coping (the CISS)?*

It is hypothesised that the BBCQ will differentiate coping in the BPD group from coping in the psychiatric comparison group, above and beyond differences picked up on the CISS, and that this difference will be directly related to the diagnosis of BPD and not to general levels of psychopathology.

In order to examine the relationship between attachment and coping, the next question that needs to be addressed is:

2) *Does the Attachment Q-Sort reliably identify attachment in BPD, in a way that is consistent with the findings of previous research?*

It is hypothesised that individuals with BPD will score higher than the psychiatric comparison group on the preoccupied and disorganised attachment scales of the Attachment Q-Sort.

In order to examine the primary research question it will then be necessary to answer the question:

3) *Are attachment scores in the BPD group correlated with coping scores on the BBCQ and the CISS?*

It is hypothesised that preoccupied and possibly disorganised attachment scores will correlate with scores on the coping scales on the CISS and the BBCQ.

BBCQ PILOT STUDY

2.1. Introduction

This chapter provides a brief summary of the literature on the concept of coping and its measurement. A more detailed discussion of the coping literature can be found in the main introduction to this research. The development of the Barnett Borderline Coping Questionnaire (BBCQ) is then described, followed by the results of the initial exploration of reliability and validity undertaken at this early stage in the development of the questionnaire. Finally, a brief discussion of the results is presented.

Coping

Individuals respond to stressful situations (a situation in which internal or external demands are seen as stretching or exceeding an individual's resources) with the aim of limiting the psychological damage to themselves. They do this by attempting to alter the situation (or the way that they think about the situation), and or the distress caused by that situation. This response is referred to as 'coping.'

Recent research has separated coping strategies into the following three domains (Endler & Parker, 1990): 1) Problem Focused Coping - where the individual attempts to improve the stressful situation itself; 2) Emotion Focused Coping, where the individual attempts to regulate the distressing emotions resulting from the stressful situation; and 3) Avoidance Coping - where the individual aims to maintain psychological and or physical distance from the stressful situation, so as not to have to deal with it. According to Endler & Parker (1990) social support need not be treated as a separate domain, but as a moderator of coping across domains.

Although the BBCQ has been designed using a factor analytic approach, ‘coping,’ as it is measured by the BBCQ, is conceptualised according to the ‘Interaction Model of Stress and Coping’ (Endler, 1988; 1997). This model draws on cognitive theories of coping and includes the psychoanalytic concept of defence mechanisms. Endler (1988; 1997) hypothesises that the individual’s personality and biology interact with stressful life experiences, resulting in a perception of threat and an increase in anxiety. This increase in anxiety in turn interacts with the individual’s personality and learning history. This produces biochemical and physiological reactions, coping reactions, behaviours aimed at ameliorating the stress, the activation of psychological defense mechanisms and even illness (See figure 1. Introduction, Pg. 34).

Cognitive theory and the biopsychosocial model of BPD, which underpins Dialectical Behaviour Therapy, have heavily influenced the development of items for the BBCQ. Like the model set out above, cognitive theories of coping are primarily concerned with the interactions between cognitions, emotions, physiological reactions and behaviours, all of which are represented in the items present in the BBCQ. In addition, the model of BPD proposed by Linehan (1993a) conceptualises BPD as a disorder of emotion regulation. In other words, the individual lacks the requisite skills to regulate their emotions, without which they cannot implement effective problem solving strategies under stress.

Coping and individuals with BPD

Coping in individuals with Borderline Personality Disorder (BPD) has been the subject of surprisingly little research, considering that dysfunctional coping strategies are commonly utilised by individuals with BPD in response to stressful situations and

are considered to be among the core features of a personality disorder. The research that has been done, indicates that individuals with BPD tend to make little use of active coping (problem/task focused coping) or social support and instead dwell on their emotions and use drugs or alcohol to reduce their distress (Vollrath et al, 1994; 1995; 1996). These researchers also found that passivity and detachment in stressful situations predicted an aggravation of the personality disorder symptoms, probably due to the ongoing crises caused by unresolved stressful situations and poor coping strategies. For instance, an individual with BPD becomes very upset after an argument. In response to her distress she goes for a walk, on her own, late at night, through a park (putting herself in a dangerous situation) and is raped. This individual then not only has to manage her distress surrounding the argument, but also the traumatic effects of the rape, which because of impaired coping resources she is ill equipped to deal with. As a result, the crises and the poor coping responses interact, creating and maintaining a vicious cycle.

Several measures of coping have been developed (e.g. the WCQ, the COPE and the CISS). However, it appears that none of the existing measures include items which sufficiently reflect the often extreme responses to stress of individuals with BPD (e.g. self-harm, putting oneself in a dangerous situation, harm to others, dissociation). These reactions to stress are widely viewed as characteristic of individuals with BPD. In addition they are seen as impacting on the quality of life of individuals with BPD and on their ability to manage the interpersonal interactions involved in any treatment approach. As a result, this study aims to begin the process of developing a questionnaire that specifically examines coping in individuals with BPD. Once developed, it is hoped that this questionnaire will also provide a useful evaluation tool

in the treatment of individuals with BPD. The BBCQ will provide mental health professionals with information regarding the coping strategies that individuals with BPD utilise. Thus, it could also be used as a method of tracking changes throughout treatment.

The measurement of coping

Coping has traditionally been measured using self-report methods (Cohen, 1987; Endler & Parker, 1990) and the interindividual approach. The interindividual approach to the study of coping uses the scores of individuals collected on a single occasion to represent a stable index of the individual's coping style (Endler & Parker, 1999; Fleischman, 1984; Miller, Brody & Summerton, 1988). In contrast, the intraindividual approach to coping involves examining the coping behaviours and cognitions of the same person, or group of people, in different situations in order to examine how coping behaviours change according to the type of stressor. However, little research has taken an intraindividual approach to coping. Like most measures of coping, the BBCQ takes the interindividual approach, in order to look at trait rather than state coping, although there is no reason why it could not be adapted to examine intraindividual or state coping at a later stage in development.

Questionnaire design

In the design of a questionnaire, the reliability and validity of the measure are central factors that need to be considered at every stage of development. Validity can be defined as examining; “whether the measure measures what it is supposed to measure” (Barker et al, 2001, pg. 66). “Reliability refers to the degree of reproducibility of the measurement.” (Barker et al, 2001, pg 61), or how similar the

results will be if the measurement is repeated. The more consistent the results are, the less error there is in the measure and the more reliable it is.

There are a number of different aspects of reliability and validity. Those relevant to this pilot study will be outlined in the method, at the relevant stage in the development of the questionnaire.

2.2. Method

The following section describes the process of developing and piloting the BBCQ (appendix A1).

The Development of the BBCQ

In order for a measure to have content validity the items need to adequately sample the different aspects of the construct that they purport to measure. To ensure that this was the case, the first stage in the development of the BBCQ was to generate a list of items, which represented the range of coping behaviours commonly exhibited by individuals with BPD (a factor analytic approach to questionnaire design). The current literature on both BPD and on coping was therefore reviewed, along with other coping questionnaires. A number of items were generated that related to the dysfunctional coping strategies of individuals with BPD e.g. *'I hurt myself'* and were combined with items describing more adaptive coping strategies e.g. *'I draw strength from difficult situations that I have managed in the past.'*

In order for a questionnaire to have face validity, items need to 'look right,' e.g. do the items ask about coping strategies rather than something else, such as symptoms of depression? To check the face validity of the questionnaire, the items were shown to a panel of experts working with individuals with BPD, and to an individual with BPD. Both the experts and the individual with BPD reported that the items were coherent and reflected the broad range of behaviours adopted by individuals with BPD in response to stress.

As a result of this consultation, 59 items were retained. 34 items that related to the maladaptive coping strategies of individuals with BPD and 25 items describing more adaptive coping strategies. Items were then randomly ordered with the aim of reducing response sets such as acquiescence (Anastasi, 1982; Bradburn, 1983).

The Coping Inventory for Stressful Situations (CISS)

The format of the BBCQ was influenced by the Coping Inventory for Stressful Situations (CISS) (Endler & Parker, 1990).

The Coping Inventory for Stressful Situations (CISS) is a 48 item self-report questionnaire, designed as an easily administered scale for measuring multidimensional coping (Endler & Parker, 1999). The scale was derived from a theoretical and empirical base and has been used in a variety of research and clinical settings.

The questionnaire measures three main coping styles: Task Focused (16 items), Emotion Focused (16 items) and Avoidance Focused (16 items) Coping. There are two subscales for the Avoidance Focused scale: Distraction (8 items) and Social Diversion (5 items). Items are rated on a five-point Likert scale ranging from 1 'not at all' to 5 'very much'. The CISS has been developed and standardised with adults, college students and psychiatric clinical patients. The scale takes approximately 5 to 10 minutes to complete.

Coefficient alpha is a test of the internal consistency of a scale's items, or the extent to which all the items are measuring the same construct (Cronbach, 1951). For psychiatric patients, alphas range from .69 to .91 (n=302, 138 females and 164 males).

For undergraduates, the alphas range from .78 to .90 (n=242, 771 females and 471 males).

Test-retest reliability measures the stability of a measure over time. The CISS scales were administered to a group of undergraduate students who were then tested again after 6 weeks. Significant correlations were found between the scores obtained at the first and second administration of the measure. For both males and females, all the scales were significantly correlated at $p < 0.001$ (n=238).

Construct validity of the CISS was examined in independent research studies looking at the relationship between the CISS, social desirability, another coping questionnaire (The Ways of Coping Questionnaire), psychopathology, depression (the Beck Depression Inventory, BDI (Beck et al, 1996) and anxiety and somatic complaints. These studies demonstrated that:

- 1) The CISS is not influenced by social desirability.
- 2) The patterns of correlations between the CISS and WCQ converged and diverged in theoretically meaningful ways. For instance, the Task Focused coping scale of the CISS significantly correlated with the Problem Focused scale on the WCQ ($r=0.42$, $p < .05$) for males and ($r=0.49$, $p < .01$) for females. The correlations between the Task Focused coping scale and the other WCQ scales were not significant. The Emotion Focused scale showed moderate to high correlations with most of the six WCQ Emotion Focused scales and there were low to moderate correlations between the WCQ Emotion Focused scales and the CISS Avoidance scale.

- 3) On measures of psychopathology, Emotion Focused coping and Avoidance coping were positively related to psychopathology and distress. A relatively high correlation was found between the CISS Emotion Focused coping scale and the BDI for both males ($r=.56$, $p<.01$) and females ($r=.51$, $p<.01$) and there was a negative relationship between the CISS Task Focused coping scale and the BDI ($r=-.23$, $p<.01$), for males and ($r=-.23$, $p<.01$) for females. The Avoidance scale appeared relatively unrelated to depression.
- 4) 157 undergraduates completed the CISS and the Somatisation scale of the Symptom Checklist (SCL-90) (Derogatis, 1977). There were significant correlations between the Somatisation scale of the SCL-90 and the CISS Emotion Focused scale ($r=.47$, $p<.01$ for males and females), the Avoidance Focused scale ($r=.34$, $p<.01$ for males; $r=.26$, $p<.01$ for females) and its Distraction sub-scale ($r=.42$, $p<.01$ for males; $r=.28$ for females $p<.01$).

To summarise, the CISS is a coping questionnaire that has been shown to be both reliable and valid.

Format of the BBCQ

For each item on the BBCQ, the individual is asked to rate whether they react to difficult, stressful or upsetting situations by using that item. The response scale is a unipolar, five-point Likert frequency-scale ranging from 1 'not at all' to 5 'very much.' The selection of a five-point scale represents a compromise between the increase in the reliability of rating scales, as the number of scale points increases (although there seem to be diminishing returns beyond 5 points), and evidence that

most people find it hard to discriminate between more than seven points (Derogatis, 1994).

The 59-item questionnaire and the CISS were then administered to a group of undergraduate medical and biochemistry students. This was done in order to provide information that would enable the further investigation of the reliability and validity of the questionnaire in the following ways:

- 1) **Internal Consistency.** Some scales use split-half reliability to examine the correlations between items that are asking about the same thing in a different way (or correlations between the two halves of a single test). Internal consistency is regarded as a better way of doing what is achieved by split-half reliability (Barker et al, 2001). The reliability of a scale is estimated from the variance and covariance of all the items with each other. The data collected from the students could therefore be used to examine the internal consistency of the BBCQ.

- 2) **Construct Validity.** This examines whether the pattern of relationships between measures, that examine the same construct and measures that examine different constructs, is consistent with the similarities and differences that would be predicted by the underlying theory of the measure. This can be divided into convergent validity (by looking at what measures of the construct correlate well with measures of related constructs e.g. does the BBCQ correlate with other coping measures) and discriminant validity (by checking that the measure is weakly correlated with measures of unrelated concepts). In this pilot study, the aim is to use the CISS in order to examine the convergent validity of the BBCQ.

Administering the BBCQ and the CISS

In order to administer the questionnaires, the researcher contacted lecturers working on undergraduate medical school courses. The researcher arranged to attend two undergraduate lectures: a small lecture with 45 biochemistry students and a large lecture attended by 200 medical students. At the beginning of the lectures, the students were presented with a small pack stapled together. The first page consisted of the information sheet explaining the study (appendix A2). The second page consisted of demographic questions e.g. sex, age, ethnicity and marital status (appendix A3). The rest of the pack consisted of the BBCQ and the CISS.

The researcher introduced herself as a Trainee Clinical Psychologist, and introduced the research as part of her Doctoral thesis. The students were informed that they were being asked to take part in the research, in order to help with the understanding of how different populations of people manage difficult or stressful situations. It was emphasized that both the questionnaires were anonymous and students were asked not to write their names on any of the sheets. The students were then asked not to complete the questionnaires if they thought that it might distress them and reminded that they had no obligation to take part in the study if they did not wish to. They were also asked to return all packs, regardless of whether or not they had been completed, so that the researcher could determine the response rate. The researcher informed the students that she would return at the end of the lecture and wait for the questionnaires to be handed in, to answer any further questions about the study, and to discuss any issues that the students may have. (In addition, the information sheet provided both the details of the researcher and of a Clinical Psychologist involved in the research who were both available for the students to talk to, if the need arose).

Response Rate

Once all the questionnaires had been returned the response rate was calculated (see Table 1).

Table 1. The number and percentages of returned and completed questionnaires.

	Questionnaires			Total
	Completed Questionnaires	Incomplete or 'spoiled' Questionnaires	Blank Questionnaires	
Students				
Biochemistry Students	35 (78%)	4 (9%)	6 (13%)	45
Medical Students	92 (46%)	14 (7%)	94 (47%)	200
Total	127 (52%)	18 (7%)	100 (41%)	245

Table 1 illustrates that the questionnaires were administered to 245 students. 52% of the students returned completed questionnaires, 7% returned incomplete or 'spoiled' questionnaires and 41% returned blank questionnaires.

Demographic information

For descriptive purposes, information was gathered regarding participant's age, gender, ethnicity and marital status.

The age of the 127 students who completed the questionnaires ranged from 18 to 26 years, with 89% of the participants aged between 18 and 21 years. (The mean age of participants = 19.63, SD = 1.62).

83 (65%) of the 127 students who completed the questionnaires were female and 44 (35%) were male.

Table 2. Marital status of participants.

	Marital Status		
	Single	In a relationship	Total
Gender			
Male	30 (68%)	14 (32%)	44
Female	54 (65%)	29 (35%)	83
Total	84 (66%)	43 (34%)	127

66% of participants were single and 34% reported that they were in a relationship (of those in a relationship, 2 (2%) were married).

Table 3. Ethnicity of participants.

	Ethnicity						Total
	White British	White Other	Afro-Caribbean	Asian (Indian Sub Continent)	Asian Other*	Other	
Gender							
Male	16 (36%)	3 (7%)	3 (7%)	12 (27%)	4 (9%)	6 (14%)	44
Female	30 (36%)	10 (12%)	3 (4%)	21 (25%)	10 (12%)	9 (11%)	83
Total	46 (36%)	13 (10%)	6 (5%)	33 (26%)	14 (11%)	15 (12%)	127

* All of whom specified that they were Chinese.

36% of the students classified themselves as white British, a further 26% as Asian (Indian sub-continent), 11% as Asian Other (Chinese), 10% as white other, 5% as Afro-Caribbean and the remaining 12% as other unspecified.

Ethical approval

Ethical approval was obtained from the University College London Hospitals Ethics Committee (appendix A4) and lecturers were approached for permission to administer the questionnaires during their lectures.

Data entry and planned analyses

Item responses for each participant were entered into an SPSS database version 10.1.

The planned analyses were as follows:

- 1) Internal reliability analysis of the questionnaire as a measure.
- 2) A principal component factor analysis of the questionnaire.
- 3) Internal reliability analysis of any scales that emerged from the factor analysis.
- 4) Correlations between any scales that were identified.
- 5) Correlations between any identified BBCQ scales and the CISS scales.

2.3. Results

Questionnaire analysis

The aim of the analysis of the questionnaire was to examine its reliability and validity. This was done in order to assess the potential usefulness of the questionnaire as a measure of coping for individuals with BPD.

A reliability analysis was conducted, in order to examine the internal reliability of the BBCQ (the extent to which all the items were measuring the same construct).

The Cronbach alpha coefficient for the BBCQ was .84, which is considered to be high.

A factor analysis was then conducted in order to examine whether or not the BBCQ could be divided into scales. The 59 items were factor analysed using a principal component factor analysis. The procedure yielded 17 factors with Eigenvalues greater than 1, accounting for 72% of the total variance. Based on the Scree Test (Cattell, 1978) the first two factors were rotated using an orthogonal varimax rotation. An orthogonal rotation method, which gives factors that are not correlated with each other, was chosen in order to minimise the overlap of factors and maximise the chance of developing distinct scales. The implications of this are that when comparing different groups of people, with regards to coping on the BBCQ, the comparisons are more likely to be between distinct factors or ways of coping. The varimax method of rotation was used for ease of interpretation. It is thought to give rotated factors that are easy to interpret because it arrives at the simplest pattern of factor loadings (Brace et al, 2003).

The two factors extracted from rotation and the Scree Plot were then investigated further. Items that loaded above .4 on one or other of the two factors were retained and examined as to whether they made logical and clinical sense as scales (Tabachnick & Fidell, 2001). No items loaded above .4 on both of these factors. 24 items did not load above .4 on either of these factors. Factor 1 contained 22 items and had an Eigenvalue of 9.02. This factor accounted for 15.3% of the variance in BBCQ total scores. Factor 2 contained 13 items and had an Eigenvalue of 6.05, which accounted for 10.26% of the variance in BBCQ total scores. These two factors appeared to represent distinct styles of coping and were labelled 'Behaviourally Dysregulated coping' and 'Adaptive Coping.' These two factors accounted for 26% of the total variance in the questionnaire.

Two clearly reliable factors were found in this student population, however a third scale was retained on the basis that a number of items, although not appearing to load in a student population, remained of potential significance to individuals with Borderline Personality Disorder. This scale was labelled 'Other Risky Behaviour coping.'

Table 4. The rotated factor loadings for Factors I and II of the BBCQ. The list of items in Scale III and the list of items not included in the first 2 factors, or in Scale III.

Items in the Behaviourally Dysregulated coping Scale (BD)	
BBCQ items (22 items)	Factor I
3. I hide away at home	.62
6. I pretend that the situation is not happening	.57
7. I get angry	.55
8. I break things	.52
17. I think about physically hurting myself	.60
18. I physically hurt myself	.55
24. I binge or restrict my food	.54
36. I put myself in a dangerous situation	.48
37. I retreat into my own head	.53
39. I worry/ruminate but do nothing	.52
40. I spend time planning how to die	.55
41. I wish that I was dead	.62
44. I panic	.56
46. I cry	.54
47. I blame myself for what has happened	.68
49. I find that I don't know what I am doing/did for a period of time	.51
50. I tell myself that I can't cope	.73
51. I tell myself that I am useless	.74
53. I shout at someone	.51
55. I verbally attack someone	.43
57. I try to find someone to solve the problem for me/rescue me	.42
58. I become increasingly distressed	.72
Items in the Adaptive Coping scale (AC)	
BBQ items (n=13)	Factor II
2. If I need it, I ask for help	.56
9. I make a plan of how to solve the problem or to feel better	.43
10. I take steps to solve the problem or feel better	.60
15. I wait for my distress to lessen before I take action	.42
23. I think my options through carefully	.48
34. I do something to make me smile/laugh	.48
35. I listen to the opinions or thoughts of people I respect	.57
38. I draw strength from difficult situations that I have managed in the past	.58
42. I remind myself that I won't always feel this bad	.68
43. I put my own needs first	.59
52. I tell myself that it is alright to feel sad/worried	.57
54. I think about how someone I respect might manage the situation.	.53
56. I tell myself that I can cope	.68

Items in the Other Risky Behaviour coping Scale (ORB)**BBCQ items (n=11)**

-
- 12. I threaten other people
 - 13. I think about physically hurting other people
 - 14. I physically hurt other people.
 - 19. I take more of my prescribed medication
 - 20. I take medication not prescribed for me
 - 21. I take more street/illegal drugs
 - 25. I get drunk
 - 30. I steal something
 - 32. I have sex with strangers
 - 33. I have unprotected sex
 - 45. I attempt suicide
-

Items not used to compute factors**BBCQ items (n=13)**

-
- 1. I try to talk to someone about the situation
 - 4. I use breathing, relaxation, prayer or meditation techniques
 - 5. I say soothing/reassuring things to myself
 - 11. I do something that I enjoy
 - 16. I focus on whatever activity I am doing
 - 22. I accept the situation as it is, even if I don't like it
 - 26. I pamper/treat myself
 - 27. I take exercise
 - 28. I watch a film
 - 29. I go to sleep
 - 31. I go for a walk
 - 48. I blame someone else for what has happened
 - 59. I try not to let anyone know that I am stressed or upset
-

Table 5. The means, standard deviations (SD) and Cronbach's coefficient alpha reliabilities for the BBCQ scales.

	Mean	SD	Coefficient Alpha
BBCQ Scales			
Behaviourally Dysregulated coping (items=22)	46	13.99	.90
Adaptive Coping (items=13)	39.6	8.21	.84
Other Risky Behaviour coping (items=11)	13.3	3.49	.70
Total BBCQ (items=59)	144	18.96	.84

Table 5 shows that the 3 BBCQ scales and the BBCQ as a whole have high internal reliability, indicating that each scale is measuring the same construct.

Validity

In order to examine whether the scales of the BBCQ converge and diverge with each other in a theoretically meaningful way, it was necessary to select the appropriate statistical test. In order to do this, the distribution of each of the scales was examined. Two of the BBCQ scales (Behaviourally Dysregulated and Other Risky Behaviour coping) and one of the CISS scales (Task Focused Coping) did not have normal distributions. As a result, the following tables provide both parametric (Pearson's r correlations) and nonparametric (Spearman's ρ) correlation coefficients.

Table 6. Correlations between the scales of the BBCQ.

	BBCQ scales			
	Behaviourally Dysregulated Coping †	Adaptive Coping	Other Risky Behaviour †	Total BBCQ
Behaviourally Dysregulated Coping †	1	-.13 ¹	.38** ¹	.79** ¹
Adaptive Coping	-.13 ¹	1	.05 ¹	.41**
Other Risky Behaviour †	.38** ¹	.05 ¹	1	.48** ¹

* $p < .05$, ** $p < .01$

† The scale is not normally distributed

¹Spearman's ρ correlations.

Table 6 shows that the scales of the BBCQ correlate with each other in a way that might be expected. The two dysfunctional coping scales, Behaviourally Dysregulated

coping and Other Risky Behaviour coping are highly significantly correlated with each other but not with the with the Adaptive coping scale of the BBCQ.

Convergent validity

In order to examine the Convergent Validity of the BBCQ, the measure was compared to another valid and reliable measure of coping, the CISS.

Table 7. Pearson's r and Spearman's rho correlations between the scales of the BBCQ and the CISS.

	BBCQ scales			
	Behaviourally Dysregulated Coping †	Adaptive Coping	Other Risky Behaviour †	Total BBCQ
CISS scales				
Task†	-.21* ¹	.74** ¹	-.11 ¹	.19* ¹
Emotion	.89** ¹	-.10	.32** ¹	.70**
Avoidance	.26** ¹	.30**	.24** ¹	.43**
Distraction	.39** ¹	.09	.30** ¹	.42**
Social Diversion	.04 ¹	.44**	.05 ¹	.23**
Total CISS	.58**	.51**	.22* ¹	.66**

*p<.05, **p<.01

† The scale is not normally distributed

¹Spearman's rho correlations

The Behaviourally Dysregulated coping scale was significantly negatively correlated with the Task Focused coping scale of the CISS and significantly positively correlated with the Emotion Focused and Avoidance Coping scales of the CISS, but not with the

Social Diversion subscale of Avoidance coping. This is consistent with the idea that the Behaviourally Dysregulated subscale is measuring constructs related to the Emotion and Avoidance subscales of the CISS, but not social diversion.

The Adaptive coping scale of the BBCQ is significantly positively correlated with the Task Focused coping scale of the CISS which is consistent with the idea that it is measuring a similar construct to Task Focused coping. As one might expect because they are measuring very different constructs, the Adaptive coping scale is unrelated to the CISS Emotion Focused coping scale.

The fact that the Adaptive coping scale is also related to the Avoidance coping scale of the CISS appears to be related to the significant relationship between Adaptive coping and the Avoidance sub scale - Social Diversion. There is no significant correlation between Adaptive coping and the Distraction Avoidance subscale.

The Other Risky Behaviour coping scale displays a similar pattern of correlations to the CISS scales, as the Behaviourally Dysregulated coping scale does. It is negatively although not significantly correlated with Task Focused coping and is significantly correlated with all the other CISS scales, except for the Avoidance subscale - Social Diversion.

All of the scales correlate with the total BBCQ and total CISS scores.

These results indicate that the BBCQ scales correlate meaningfully with the CISS scales, but that there may be some overlap between the Behaviourally Dysregulated and other Risky Behaviour coping scales.

2.4 Discussion

Reliability of the BBCQ scales

This pilot study involved the construction and initial exploration of the reliability and validity of a new measure of coping in individuals with BPD, the BBCQ.

The first stage in evaluating the reliability of the BBCQ indicates that the measure has high internal consistency, with a Cronbach Alpha of .84. This indicates that items in the scale appear to be measuring the same construct.

A factor analysis revealed that the questionnaire consisted of two main factors with item loadings of .4 and above on both, accounting for 26% of the total item variance. Although these two factors accounted for a relatively low percentage of the item variance, on further examination these factors not only loaded statistically, but the items clustered together logically, providing support for their usefulness as scales.

The first factor contained items that reflected poorly thought out coping strategies. These are responses to stress that might in some cases provide temporary relief from a stressful or difficult situation, but that are likely to exacerbate any stressful or difficult situation in the long term e.g. *'I pretend that the situation is not happening'* (cognitive avoidance). This factor also includes interpersonal strategies e.g. *'I shout at someone'* and responses to stress that reflect an inability to utilise coping strategies e.g. *'I tell myself that I am useless'* (cognitive self-statements) and behavioural coping strategies e.g. *'I physically hurt myself.'* This factor also contains emotional responses to stress *'I get angry.'*

It seems that items on this scale reflect cognitive, emotional and behavioural responses to stressful or difficult situations, some of which involve interpersonal interactions. As a result of the potentially negative impact of these responses to stress, in this factor, this scale was labelled 'Behaviourally Dysregulated coping.' The internal consistency of the first factor was .90, which is considered to be high, supporting the idea that items on this factor measure one construct.

The internal consistency of the second factor is .84, which is also high, supporting the idea that these items reflect one construct. Items that load above .4 on this factor include responses to stressful situations that function either to ameliorate the stress of the situation (e.g. *'I take steps to solve the problem or feel better'*) or to improve the mood of the individual who is under stress, therefore enabling them to cope more effectively with the stress (e.g. *'I do something to make me smile/laugh'*). As with the first factor, the items reflect cognitive (e.g. *'I think my options through carefully'*), behavioural (e.g. *'I put my own needs first'*), emotional (*'I wait for my distress to lessen before I take action'*) and interpersonal items (*'If I need it, I ask for help'*). As a result of the potentially beneficial impact of these items, this scale was labelled 'Adaptive Coping.'

A third scale was derived from the remaining items on the basis that the items were potentially relevant to individuals with BPD, although they did not load together above .4, on a factor, in a student population.

Whilst the Behavioural Dysregulation Scale contains some items that reflect behaviours that involve risk to the individual (e.g. *'I put myself in a dangerous situation,' 'I physically harm myself'*) and potential distress to others (e.g. *'I verbally*

attack someone’). This third scale contains behaviours that are of high risk to the individual (e.g. *‘I take more street/illegal drugs,’* and to others *‘I physically hurt others’*). Although the internal consistency of this third scale (.70) is less than the internal consistency of the other two scales, it is still considered to be high and can therefore be regarded as a reliable scale. Like the other two scales, this third scale contains items that reflect cognitive, behavioural and interpersonal responses to stress. However, unlike the other two scales there are no clear emotional responses to stress, although it could be argued that all the items in this scale are responses to extreme distress. This scale was labelled the ‘Other Risky Behaviour coping scale.’

The intercorrelations of the BBCQ scales

The intercorrelations of the BBCQ scales provide some support for the multidimensionality of the BBCQ. The scales correlate with each other and with the total BBCQ score in a logical way. As one might predict, the Adaptive coping scale (which could be said to reflect helpful coping strategies) is unrelated to the Behaviourally Dysregulated and Other Risky Behaviour Coping scales (which reflect unhelpful coping strategies) and which are significantly positively correlated with each other. This indicates that individuals who use more coping strategies on the Behaviourally Dysregulated and probably the Other Risky Behaviour coping scale, are likely to use less coping strategies on the Adaptive Coping Scale.

The correlations of the BBCQ Scales with the CISS scales

Initial exploration of the construct validity of the BBCQ was undertaken by comparing the questionnaire to another coping measure, that has itself been shown to be both reliable and valid (Convergent Validity).

The scales of the BBCQ and the CISS appear to converge and diverge in logically meaningful ways.

Task Focused coping on the CISS reflects efforts made to solve, alter or cognitively restructure a problem and is therefore conceptually similar to Adaptive Coping on the BBCQ. This hypothesis is supported by the fact that Task Coping and Adaptive Coping are significantly correlated, whilst Task Focused Coping is unrelated to Behaviourally Dysregulated and Other Risky Behaviour coping.

The Emotion Focused coping scale on the CISS describes emotional reactions that are self-oriented and aim to reduce stress, but often fail to do so and may in fact have the reverse effect of increasing it. As might be predicted, this scale correlates highly significantly with the Behaviourally Dysregulated coping scale of the BBCQ, which reflects unhelpful behaviours, cognitions and emotional reactions to stressful events. The Emotion Focused coping scale also correlates highly significantly with the Other Risky Behaviour Scale and negatively, although not significantly, with the Adaptive coping scale of the BBCQ.

The Avoidance Scale of the CISS reflects activities and cognitive changes aimed at avoiding the situation either through distraction or social diversion. This scale is significantly correlated with all the BBCQ scales. It is proposed that this is a

reflection of the way in which the two questionnaires differ. A number of items that Endler & Parker (1990) regarded as avoidance coping, are not regarded as avoidance coping by the developer of the BBCQ. For instance, items in their Social Diversion subscale involve utilising the support of other individuals in the environment, such as *'I talk to someone whose advice I value,'* (CISS item 35) in order to solve a problem. This is viewed by the developer of the BBCQ to be a functional and appropriate way to cope with a stressful situation, and not as an avoidance coping strategy. This difference in conceptualising the role of social support in coping is reflected by the fact that it is the Social Diversion subscale of the CISS that significantly correlates with the Adaptive Coping scale and not the Distraction subscale of the CISS. In contrast, the Distraction scale of the CISS is highly correlated with the Behaviourally Dysregulated coping and the Other Risky Behaviour coping scales of the BBCQ.

As the majority of the scales on both questionnaires relate to dysfunctional coping strategies, it is unsurprising that there is a stronger relationship between these scales and the total BBCQ and total CISS.

It is interesting, although again perhaps not surprising, that not only do the Behaviourally Dysregulated coping scale and the Other Risky Behaviour coping scale correlate significantly with each other, but that the pattern of correlations between these two scales and the CISS scales are the same. This raises the question of whether or not these two scales are meaningfully distinct, which is a question that cannot be answered at this point in the development of the questionnaire, but that certainly requires further exploration in a BPD population.

At this early stage in the development of a questionnaire to measure coping in individuals with BPD, the preliminary evidence indicates that the BBCQ scales have sufficiently high reliability to warrant their use in further research and the further development of this questionnaire. In addition, initial evidence for the convergent validity of the BBCQ was obtained. Several of the BBCQ scales were positively associated with the conceptually similar scales, and unrelated to conceptually different scales of a more established coping questionnaire.

Limitations of this pilot study and the BBCQ

One of the limitations of this research is that there were a low number of participants for a factor analysis to be conducted. However, as the study was a pilot study conducted in a limited time period, and due to the difficulties inherent in sampling large populations, the researcher adhered to the recommended minimum number of participants for a factor analysis, which is twice the number of items in the questionnaire (118), (Kline, 1994). Further development of the questionnaire would involve administering the questionnaire to a larger population.

A further limitation of this study is that the BBCQ was administered to a student population rather than a population of individuals with BPD. A student population was selected in order to provide a large enough sample to undertake a factor analysis. However, it could be argued that at this early stage in the development of the questionnaire, it is essentially being evaluated as a measure of coping, rather than of coping in BPD. Whilst the main study in this project involved the administration of this questionnaire to a population of 22 individuals with BPD, the further development of this questionnaire would have to involve the administration of the

BBCQ to a large enough population of individuals with BPD to conduct a factor analysis. This would then enable the comparison of this population with a student population in order to demonstrate significant differences in coping between the two groups.

Another potential criticism of this questionnaire, and perhaps of other coping questionnaires, is the lack of distinction between what is a reaction to stress and what is a method of coping with stress. For instance, is an emotional response, such as anger, a coping strategy or a reaction that determines a coping behaviour? (e.g. I get angry therefore I might cope by shouting at someone or breaking something). Whether emotions like anger and worry should be included in a coping questionnaire, is a question for further theoretical consideration.

As already mentioned, the division of the questionnaire into three separate scales could be criticised on the basis that the Behaviourally Dysregulated coping and Other Risky Behaviour coping scales appear to overlap. It is possible that they are not measuring distinct scales but that they both measure aspects of emotion focused and avoidance coping. It remains to be seen if this division is meaningful in a BPD population. Further development of the questionnaire may involve the addition of new items and even new scales, or the amalgamation of the scales that have emerged from this pilot study. At this embryonic stage in development, one can only speculate.

Suggestions for further research

In this pilot study of the BBCQ, some of the initial work on reliability and validity has been undertaken. Further analysis of the questionnaire might include test-retest

reliability and looking at the criterion validity of the BBCQ. Criterion validity is divided into concurrent validity and predictive validity. To assess for concurrent validity, the measure is correlated with a relevant criterion or indicator, e.g. a coping scale with clinicians' ratings of an individual's ability to cope. Predictive validity involves examining the scale's correlation with a future event e.g. the use of a hopelessness scale to predict suicide. The BBCQ could be correlated with therapeutic outcome. Seeing whether a scale can separate two groups also comes under the heading of criterion validity, for example, does the BBCQ distinguish between individuals with and without BPD.

Conclusion

In conclusion, an initial examination of the reliability and validity of the BBCQ shows promising results. The measure has clear potential as a way of examining the relative strengths and weaknesses in an individual's coping repertoire and also has the potential for future use as a measure of therapeutic progress. However there is still a long way to go before the questionnaire can be said to be a reliable and valid measure of coping in individuals with BPD.

METHOD

3.1 Design of the study

In order to test the hypotheses of the study two independent groups of participants were recruited: 1) A group of individuals diagnosed with BPD and; 2) a psychiatric comparison group of individuals with Axis I mood disorders. Both groups completed an assessment procedure designed to assess participants' attachment and coping styles.

Only female participants were recruited for this study. This decision was made on the basis that 75% of individuals who meet criteria for BPD are women (DSM IV, APA, 1994; Widiger & Frances 1989). In addition, some research has indicated that males and females with BPD differ with respect to certain characteristics, with females more likely to fall into a non-organic subtype of the disorder. Substance use disorders have also been shown to be more common in male BPD patients, and eating disorders more common in female BPD patients (Zanarini et al, 1998).

The exclusion of one gender therefore reduces the number of variables to take into account in the interpretation of the results.

3.2 Recruitment procedures

The recruitment procedure for both groups of participants is provided below.

BPD group

Participants in the BPD group were recruited from community mental health teams, day hospitals and specialist personality disorders services. All participants in the BPD group were initially approached about the study by their keyworker, or another

professional involved in their care, and shown the information sheet. If the potential participant gave permission for their details to be passed on to the researchers, one of the researchers contacted them by telephone to discuss the study further. If they then agreed to participate in the study, a time and venue was arranged for the assessment to take place.

Participants in the BPD group had either already received a diagnosis of BPD from a specialist personality disorder service or their psychiatrist, or they had a suspected diagnosis of BPD. At assessment, diagnosis was confirmed by the administration of the Borderline Personality Disorder section of the Structured Clinical Interview for DSM IV Axis II Personality Disorders (SCID II: First et al, 1995). All of the individuals in the BPD group endorsed five or more items on this interview.

Inclusion criteria for the BPD group were:

- Being between 18 and 65 years of age
- Meeting diagnostic criteria for BPD
- Being female
- Speaking fluent English

Exclusion criteria were:

- Being actively psychotic
- Being unable to read
- Having a learning disability

All of the above were established through communication with the keyworker and in some cases with the individual themselves.

Psychiatric comparison group

Participants for the psychiatric comparison group were recruited in a similar manner to the BPD group. They were recruited from community mental health teams, day hospitals and psychiatric outpatient teams, via their keyworkers or their psychologist (appendix B1). Like the BPD group, participants were approached by mental health professionals, with whom they were familiar, and shown the information sheet. If they agreed to participate they were then contacted by one of the two researchers involved in the project, for further discussion of the research.

Inclusion criteria for the psychiatric comparison group were:

- Being between 18 and 65 years of age
- Meeting diagnostic criteria for an Axis I mood disorder
- Being female
- Speaking fluent English

Exclusion criteria were:

- Meeting criteria for BPD or having a diagnosis of another Axis II personality disorder
- Having a diagnosis of psychosis
- Being unable to read
- Having a learning disability

As in the BPD group, the above criteria were established through communication with the keyworker and, in some instances, with the individual themselves before or during the assessment.

3.3 Measures

The measures for this study are described below in the order that they were completed.

1) The Borderline Personality Disorder section of the Structured Clinical Interview for DSM IV Axis II Personality Disorders Questionnaire (SCID II Questionnaire) (First et al, 1995).

This is a self-report screening questionnaire designed to shorten the time it takes for a clinician or researcher to administer the SCID II. The section relating to BPD consists of 15 questions pertaining to the behaviour and mood of the participant over a period of several years. The individual completing this brief questionnaire is asked to circle 'yes' or 'no' to each question e.g. *Have you often become frantic when you thought that someone you really cared about was going to leave you?*

The interviewer then asks the questions from the SCID II interview (see below) that were circled 'yes' on the SCID II questionnaire.

Jacobsberg et al (1995) examined the validity of the SCID II questionnaire administered in conjunction with the Personality Disorder Examination (Loranger et al, 1987). They found that the false negative rate was low for all personality disorders diagnoses and concluded that using the questionnaire to identify the questions that needed following up on the SCID II was a valid method of diagnosis. Good levels of agreement between the questionnaire and the SCID II were also demonstrated by Ekselius et al (1994).

2) The Borderline Personality Disorder Section of the Structured Clinical Interview for DSM IV Axis II Personality Disorders (SCID-II), (First et al, 1995).

The SCID II is a semi-structured diagnostic interview for assessing the 10 DSM IV Axis II Personality Disorders. It can be used to make categorical diagnoses or dimensionally, by noting the number of personality disorder criteria coded '3.' The SCID II has been used for a number of research purposes, including its purpose in this study, which was to select individuals from a general setting who have a particular diagnosis (Schotte et al, 1991). To date, the majority of studies on the reliability and validity of the SCID II interview have been conducted in relation to the DSM III-R diagnostic criteria for BPD. These studies have reported a kappa of .87 for the test-retest reliability of the Borderline Personality Disorder Scale (Malow et al, 1989). Joint reliability designs have reported kappas of .82 for Borderline Personality Disorder (Fogelson et al, 1991).

Concurrent validity has been investigated by studies comparing the SCID II to other methods of diagnosing PD. This is made difficult by the lack of a 'gold standard' measure. However, Hueston et al (1996) demonstrated some concurrent validity by showing that in a group of primary care patients the comorbid presence of a PD was associated with lower functional status, lower satisfaction with health care and higher risk for depression and alcohol abuse. Fossati et al (1999) used the SCID II to diagnose individuals with BPD and used a factor analysis to examine the construct of BPD. They concluded that the diagnosis of BPD obtained by using the SCID II was consistent with the construct of BPD.

3) Beck Depression Inventory, 2nd edition (Beck et al, 1996).

The Beck Depression Inventory, 2nd edition (BDI II) is a 21 item self-report questionnaire, which aims to measure severity of depressive symptomatology. Each item contains four statements relating to different levels of symptom severity. The subject selects the statement that best describes how they have been feeling over the past two weeks, including the day during which they are completing the questionnaire. Beck et al (1996) recommended that a total score of 0-12 should be regarded as non-depressed to mildly depressed, 13-19 as moderately depressed and 20-63 as severely depressed. The BDI is regarded as the 'gold standard' in self-report measures of severity of depression.

4) The Coping Inventory for Stressful Situations, (Endler & Parker, 1990).

The Coping Inventory for Stressful Situations (CISS) is a 48 item self report questionnaire designed as an easily administered scale for measuring multidimensional coping (Endler & Parker, 1990). The scale was derived from a theoretical and empirical base and has been used in a variety of research and clinical settings.

The questionnaire measures three main coping styles: Task Focused (16 items), Emotion Focused (16 items) and Avoidance Focused (16 items) coping. There are two sub-scales for the Avoidance Focused coping scale: Distraction (8 items) and Social Diversion (5 items). Items are rated on a five-point scale ranging from 1 'not at all' to 5 'very much'. The CISS has been developed and standardised with adults, college students and psychiatric patients. The scale takes approximately 5 to 10 minutes to complete depending on individual differences. The CISS has been shown to be a

reliable and valid measure of coping, with a stable factor structure. (For further data on the reliability and validity of this questionnaire refer to chapter 2).

5) The Symptom Checklist (Derogatis, 1977).

The Symptom Checklist (SCL-90) is a 90-item self-report symptom inventory designed to reflect the psychological symptom patterns of community, medical and psychiatric respondents at a given point in time. Individuals are asked to rate each item for the past seven days, including the day of testing, on a five-point Likert scale of distress (0-4) ranging from 'not at all' to 'extremely distressing'. It is scored and interpreted in terms of nine primary symptom dimensions.

Somatisation (SOM), Obsessive Compulsive (O-C), Interpersonal Sensitivity (I-S), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic Anxiety (PHOB), Paranoid Ideation (PAR), Psychoticism (PSY). In addition there are three other scores which can be calculated, the Global Severity Index (GSI), the Positive Symptom Distress Index (PSDI) and the Positive Symptom Total (PST). Research confirms that these three indicators reflect distinct aspects of psychological disorder (Derogatis, Yevzeroff & Wittelsberger, 1975).

Reliability coefficients in two studies ranged from a low of .77 for Psychotism to a high of .90 for Depression (Derogatis, Rickels & Rock, 1976) and from a low of .79 for Paranoid Ideation to a high of .90 for Depression (Horowitz et al, 1988).

In the same studies as above, test-retest reliability measures of 94 heterogeneous psychiatric outpatients were assessed and reassessed one week later. The majority of coefficients ranged between .80 and .90 (Derogatis et al, 1976). In the Horowitz et al

(1988) study, the elapsed time was 10 weeks and the coefficients ranged from .68 for Somatization and .83 for Paranoid Ideation.

The SCL-90 has also been shown to have convergent, discriminant and concurrent validity. For example, Weissman et al (1977) showed high correlations between the Depression dimension of the SCL-90 and the Hamilton Rating Scale for Depression. A study of the concurrent validity of the Depression dimension of the SCL-90, with the BDI showed correlations of .80 (Asberg et al, 1973).

The SCL-90 is a valid and reliable measure that has been widely used as a research tool in studies of: anxiety and depressive disorders, general psychopathology and psychological distress, psychopharmacology outcomes, psychotherapy outcomes, suicidal behaviour and drug and alcohol abuse.

6) The Barnett Borderline Coping Questionnaire (BBCQ) (Barnett, 2002).

The BBCQ is a 59 item self-report questionnaire designed as an easily administered scale for measuring coping in BPD. The scale was derived using a factor analytic technique. Although it is still in the very early stages of development, the BBCQ has been piloted on undergraduate university students and an initial study of the reliability and validity of the questionnaire shows promising results (See chapter 2 for further details of the psychometric properties of the BBCQ).

The questionnaire measures three coping styles: Adaptive (13 items), Behaviourally Dysregulated (22 items) and Other Risky Behaviour (11 items) coping. A total BBCQ score can also be obtained (59 items). Items are rated on a five-point Likert scale

ranging from 1 'not at all' to 5 'very much' and the scale takes approximately 5 to 10 minutes to complete depending on individual differences.

7) The Attachment Q-sort (Fonagy et al, 2002).

The Attachment Q-sort is based on the Q-sort methodology (Stephenson, 1936) that requires participants to rank order items with a fixed distribution. (The person rather than the test is then factor analysed). The forced choice nature of the fixed distribution mitigates against response sets (Fonagy et al, 2001).

The computerised version of the Attachment Q-sort consists of a blank pad on which each of 60 statements pertaining to the relationship being rated, appear one by one e.g. *'When I am hurting, talking to him/her makes me feel better.'* The participant is asked to sort each of these statements into an empty pyramid below the pad. The pyramid has 7 columns which have at their base the statements: 'most true', 'quite true', 'slightly true,' 'mixed,' 'slightly untrue', 'quite untrue' and 'most untrue.' The pyramid shape is the result of there being most spaces in the mixed column and least spaces in the 'most true' and 'most untrue' columns. As there are only 60 spaces and there are 60 statements, the individual rating the relationship has to think carefully about which statement best fits where (statements can be moved around as much as the individual wishes).

The Attachment Q-sort is designed on the basis that individuals may attach differently to the different individuals in their lives. Five target attachment figures can be rated on the Attachment Q-sort: Significant other, best friend, mother, father and acquaintance.

For the purpose of this study its creators adapted the Attachment Q-sort so that participants could rate what we have called their ‘primary caregiver.’ Participants first practised putting the statements into the appropriate columns when thinking of a teacher or another person whom they respected when they were growing up. After a few practice items, the Attachment Q-sort was opened by the researcher. The following instruction then appeared on the computer screen: “*Rate your relationship with the main person responsible for your physical and emotional needs, as you were growing up.*” This was qualified with the additional instruction, “*even if that person failed to do so.*” (This is how the researchers defined the primary caregiver).

The Attachment Q-sort has five scales, two of which are non-attachment scales: Positive non-attachment and negative non-attachment and 3 attachment scales: Secure, preoccupied (ambivalent) and dismissing (avoidant). An additional disorganised attachment scale has been computed for use in this study (by multiplying preoccupied and dismissing attachment scores). The addition of this scale was based on both theory and research that indicates that disorganised attachment is related to BPD.

Table 1. The internal consistency (Ic) (Cronbach alphas) and the test-retest reliabilities (Tr) for the Attachment Q-sort scales.

Attachment Q-sort Scales										
	Secure		Preoccupied		Dismissing		Positive non attachment		Negative non attachment	
Attachment Q-sort Targets	Ic	Tr	Ic	Tr	Ic	Tr	Ic	Tr	Ic	Tr
Across Targets	.71	.78	.73	.76	.83	.80	.71	.73	.74	.83
Significant Other	.63	.82	.54	.67	.72	.54	.48	.69	.67	.78
Mother Figure	.68	.82	.60	.75	.81	.80	.70	.66	.71	.83
Father Figure	.75	.84	.67	.80	.82	.84	.65	.74	.75	.89
Best Friend	.52	.50	.45	.57	.69	.69	.24	.48	.30	.58
Acquaintance	.64	.48	.45	.48	.78	.78	.55	.63	.72	.68

As shown in table 1, for the mother figure Cronbach alphas range from .60 for preoccupied attachment to .81 for dismissing attachment. For the father figure, they range from .65 for positive non-attachment to .82 for dismissing attachment.

Test-retest reliability was examined by asking 56 participants to complete the Attachment Q-sort on a second occasion within a period of two weeks (range 13-16 days). As shown in table 1, test-retest reliabilities were all adequate. They ranged from .66 to .83 for the mother figure and .74 to .89 for the father figure.

The Attachment Q-sort also shows promising convergent and discriminant validity with respect to a number of other self report measures, including two attachment questionnaires, The Experience of Close Relationships Questionnaire (ECR, Brennan et al, 1998) and The Relationship Questionnaire (RCQ, Bartholemew & Horowitz, 1991). Consistent with the fact that the ECR focuses on romantic relationships, the

multiple correlations for 'significant other' are higher than for the other Attachment Q-sort targets. Also, as might be predicted, there is an inverse relationship between secure attachment and avoidance but not between secure attachment and anxiety. Dismissing attachment has a positive relationship with avoidance, whereas preoccupied attachment relates to anxiety.

Although the RCQ secure scale showed limited correlations with the Attachment Q-sort, the RCQ preoccupied scale showed significant correlations with the preoccupied scales for all the Q-sort targets apart from best friend. (See Fonagy et al, 2002 for a more detailed description of correlations between the Attachment Q-sort and other attachment measures).

Measures compared with the Q-sort to examine criterion validity include: 1) The Dyadic Adjustment Scale (Spanier 1976), which as predicted relates to the Q-sort 'significant other' target. 2) The Parental Bonding Instrument (Parker, Tupling and Brown, 1979) on which mother and father care are highly correlated with the Q-sort attachment ratings of mother and father. 3) The Inventory of Interpersonal Problems (Horowitz, Rosenberg, Baer, Ureno and Villasenor, 1988) on which more interpersonal psychopathology is associated with higher preoccupied attachment scores. 4) The Brief Symptom Inventory (Derogatis, 1993) on which symptoms are associated with preoccupied attachment with significant other and acquaintance, as well as with dismissing attachment with the mother.

The Attachment Q-sort is still in development, but initial studies of reliability and validity show promising results.

3.4 Testing procedure

Testing rooms

The majority of testing was undertaken at an adult mental health psychology department. Other testing locations included day hospitals, community mental health centres (where participants from both groups were receiving treatment) and the homes of some participants.

Rooms were arranged so that the participant and the investigator faced each other, usually across a table.

Following their arrival, participants were presented with the information sheet (appendix B2). For the majority of participants, this was the second time that they had seen the information sheet, because they had already discussed it with their keyworker. They were then given the opportunity to discuss the study further and ask questions. Once they expressed that they had no more questions and were happy to proceed with the research they were given a consent form and asked to complete it (appendix B3).

The following assessment procedure took between two and a half to three hours to complete with breaks as required.

Two studies were combined in order to ensure that the same participants did not need to complete similar tests on two separate occasions. The full assessment is listed below in the order that it was administered.

1. The following demographic information was collected in writing: age, gender, ethnicity, marital status, employment status, number of years in therapy and type of therapy (appendix B4).
2. The SCID II questionnaire.
3. The SCID II interview for BPD (questions that participants had indicated a positive response to, on the SCID II questionnaire, were followed up).
4. The BDI.
5. The CISS.
6. Reading the mind in the eyes - Form A (other study).
7. The SCL-90.
8. The Story Comprehension Test - Form A (other study).
9. The BBCQ (Appendix A1)
10. The Attachment Q-sort
11. Four questions from the Adult Attachment Interview (other study).
12. Reading the mind in the eyes - Form B (other study).
13. The Story Comprehension Test - Form B (other study).
14. Debriefing (At the end of the assessment, participants were given the opportunity to talk about how they found the assessment)

Payment

Following completion of the testing procedure participants were paid ten pounds to cover their expenses.

3.5 Participants

Of the 50 individuals who agreed to participate in the research, 8 dropped out, and 3 individuals who were tested did not meet criteria for the study. A total of 15 appointments were rescheduled during the research.

39 females, who met criteria for one of the groups, participated in the research. 22 participants (56%) were diagnosed with Borderline Personality Disorder and 17 (44%) with an Axis I disorder. 16 out of the 17 participants in the comparison group, (94%) had a primary diagnosis of a mood disorder and 1 individual (6%) had a primary diagnosis of Obsessive Compulsive Disorder. 4 of the 17 participants in the comparison group (24%) had a diagnosis of Bipolar disorder, and 5 of the 17 participants (29%) had additional anxiety related diagnoses, including Generalised Anxiety Disorder and Panic Disorder.

Individuals identified as the primary caregiver on the Attachment Q-sort.

Thirty-two participants (82%) identified their birth mother as their primary caregiver, 1 participant (2%) identified her aunt as her primary caregiver, 3 individuals (8%) identified their birth father as their primary caregiver and 3 (8%) their foster mother as their primary caregiver. 12 individuals (31%) rated a relationship with a primary caregiver that was no longer alive at the time of the assessment.

3.6 Ethical Permission

This research was granted ethical permission from Camden and Islington NHS Trust, Local Research Ethics Committee and Barking and Havering Local Research Ethics Committee (appendix B5).

In addition, ethical permission for Cassel clients was granted via ethical approval for previous research.

3.7 Planned Analyses

Data will be entered into an SPSS database version 10.1 and analysed. The main analyses planned are outlined below:

1) In order to examine differences between the two groups, for continuous descriptive variables such as age and BDI scores, the distribution of the variables will be examined for each group and then either t-tests for independent samples (normal distribution) or Mann-Whitney U tests (non parametric data) will be carried out. The same approach will be used to examine differences between the two groups in terms of service use. Any differences between the two groups for categorical variables e.g. ethnicity and marital status will be examined using chi-square tests.

2a) Differences between the two groups on the predicted variables of coping will be analysed using t-tests or Mann-Whitney U tests depending upon the normality of the distribution of results.

2b) In order to establish whether any significant differences found between the two groups on the coping scales are due to the effect of group, descriptive variables or service use variables on which the two groups differed will be controlled for using analyses of covariance (ANCOVAS).

3a) Differences between the two groups on the explanatory variables (Attachment Q-sort scales) will be examined as described for the predicted variables (t-tests/Mann-Whitney U tests).

3b) Any significant differences found on the explanatory variables will then be controlled for when examining differences in coping using ANCOVAS.

3c) If the significant differences found remain significant after descriptive and service use variables are controlled for, then regression analyses will be carried out to see if the differences in coping scores in the two groups can be accounted for by the differences in attachment scores.

RESULTS

In this chapter, the results of the research are described, starting with background descriptive information about the two groups. The coping data is then described, followed by the attachment data and the relationship between the coping and attachment data. Finally, post hoc analyses of the data set are presented, in order to examine the relationship between attachment and coping in a sample of individuals with mental health problems.

4.1 background information

Initial analyses were conducted comparing the two groups (the BPD group and the psychiatric comparison group). This was done in order to examine whether there were any differences between the two groups for continuous descriptive variables, including age, BDI II scores and scores on the SCL-90 scales that might account for any differences found between the two groups' scores on the coping and attachment measures. Following this, differences between the two groups on the categorical variables of marital status, level of education, employment status and ethnicity were examined.

Sample distributions

For all of the above continuous variables, distributions in both groups were tested for skewness and kurtosis (the skewness and kurtosis statistics were divided by their standard error). Distributions in the BPD group were found to be normal. However, in the comparison group age was negatively skewed, and two of the SCL-90 subscales, Hostility and Somatisation were positively skewed. For these three variables, a Mann-

Whitney U test was used to compare the groups. For all the other variables, independent samples t-tests were used.

Differences between the BPD group and comparison group for descriptive variables.

Table 1. The means and standard deviations (SD) for age, the BDI II and the SCL-90 scales for both groups.

	BPD group (BPD) (n = 22)		Psychiatric Comparison group (PCG) (n = 17)		t-value (df=37) [or U value]	Significance (p)
	Mean	SD	Mean	SD		
Age	37.91	6.69	44.65	9.17	103 ¹	.012*
BDI II	33.50	12.84	27.94	14.72	1.26	.216
SCL-90						
Somatisation	1.63	.79	1.14	.84	119 ¹	.054
Obsessive Compulsive	2.35	.70	1.76	.87	2.31	.026*
Interpersonal Sensitivity	2.19	1.00	1.43	.93	2.43	.020*
Depression	2.65	.78	1.93	1.00	2.49	.018*
Anxiety	2.21	1.19	1.49	1.06	1.96	.058
Hostility	1.27	1.00	.72	.90	106 ¹	.021*
Phobia	1.83	1.18	.96	.73	2.69	.011*
Paranoia	1.83	.98	1.24	.96	1.89	.067
Psychotism	1.60	1.05	1.22	.88	1.19	.240
Positive Symptom Distress Index	66.11	15.34	54.24	17.51	2.25	.030*
Positive Symptom Index	2.68	.55	2.22	.61	.914	.019*
Global Severity Index (GSI)	2.22	.70	1.41	.71	2.60	.013*

p<.05, ¹Mann-Whitney U Value

Table 1 illustrates that the psychiatric comparison group was significantly older than the BPD group. There were no differences between the two groups with regards to severity of depression (as measured by the BDI II), although the BPD group scored higher overall on the BDI. It also shows that the BPD group scored significantly higher on the Obsessive Compulsive, Interpersonal Sensitivity, Depression, Phobia, Hostility, Positive Symptom Total, Positive Symptom Distress Index and the Global Severity Index scales of the SCL-90. There were no significant differences between the two groups on the Somatisation, Anxiety (although these scales were approaching significance), Paranoia and Psychotism scales of the SCL-90. However, there was a general trend in the data that the individuals in the BPD group scored higher than the comparison group on all scales of the SCL-90.

To summarise, these results indicate that the two groups differed significantly with regards to their levels of psychopathology (SCL-90 GSI). The individuals with BPD reported more and greater severity of psychological symptoms. Individuals in the BPD group scored significantly higher than the psychiatric comparison group on the Depression subscale of the SCL-90. However, the BDI II is widely regarded as the 'gold standard' measure of severity of depression and as the two groups did not differ significantly in their BDI II scores, they were assumed to have similar levels of depression.

As the two groups' GSI scores differed significantly, and the GSI provides an overall score of psychopathology, further analyses involving the SCL-90 will utilise just the GSI and not the other scales.

The differences between the two groups on the categorical variables of marital status and level of education were then examined using chi-square tests. Analyses showed that the variables employment status and ethnicity had cells with an expected count of less than 5. As a result, Fisher's Exact tests were carried out on these variables. The results are shown in table 2.

Table 2. Differences between the BPD and psychiatric comparison groups in terms of marital status, education, employment status and ethnicity. (Pearson chi-square tests are shown for Marital Status and Education, and Fisher's Exact Tests for employment status and ethnicity).

	BPD (n = 22)	PCG (n = 17)	Total (n = 39)	χ^2 (df)	Significance (p)
Marital Status					
Single	15 (52%)	14 (48%)	29	1.010	.315
In a relationship	7 (70%)	3 (30%)	10	(1)	
Total	22 (56%)	17 (44%)	39		
Education					
No qualifications	5 (38.5%)	8 (61.5%)	13	2.570	.277
GCSE/A-Level	9 (64%)	5 (36%)	14	(2)	
Further Education	8 (67%)	4 (33%)	12		
Total	22 (56%)	17 (44%)	39		
Employment Status					
Unemployed	16 (57%)	12 (43%)	28	.022	Exact p 1
Employed/student	6 (54.5%)	5 (45.5%)	11	(1)	
Total	22 (56%)	17 (44%)	39		
Ethnicity					
White British	20 (57%)	15 (43%)	35	.074	Exact p 1
Other	2 (50%)	2 (50%)	4	(1)	
Total	22 (56%)	17 (44%)	39		

Table 2 shows that there were no differences between the two groups with regards to marital status, education, employment status or ethnicity. This indicates that none of these variables could be said to account for any differences that might be found between the two groups on measures of coping or attachment.

Differences between the two groups in terms of service use.

This section of the results provides information regarding the amount and type of therapy that participants had received over the years and whether or not they were in therapy at the time of assessment. As amount of therapy in years was positively skewed in the psychiatric comparison group a Mann-Whitney U test was conducted.

Table 3. Amount of therapy received by individuals in each group.

	BPD (n=22)		PCG (n=17)		Mann-Whitney U value	Significance (p)
	Mean	SD	Mean	SD		
Duration of Therapy in years	6.43	5.08	4.27	6.74	113	.036*

Table 3 shows that individuals in the BPD group had spent significantly more years in therapy than the psychiatric comparison group.

In conjunction with the above information about participants, data was also collected on the type of treatment that participants had received. Participants reported that they had had a range of therapeutic interventions over the years, including, Psychodynamic Psychotherapy, Dialectical Behavior Therapy (8 participants in the BPD group only), Cognitive Behaviour Therapy, counselling, monitoring by a psychiatrist, attendance at a day hospital programme and a mixture of the above. As a result of the small sample, these were divided into two categories, therapy/counselling and support/monitoring (monitoring by a psychiatrist and/or day hospital attendance). Participants were also asked to report whether or not they were in therapy at the time of the assessment.

Table 4. Type of therapy participants had received over the years and whether or not they were in therapy at the time of assessment.

	BPD (n=22)	PCG (n = 17)	Total (n = 39)	χ^2 (df=1)	Significance (p)
Type of therapy					
Therapy/ counselling	20 (61%)	13 (39%)	33	1.536	.215
Support/ monitoring	2 (33%)	4 (67%)	6		
Total	22 (56%)	17 (44%)	39		
Current therapy status					
Currently in therapy	20 (64.5%)	11 (35.5%)	31	4.038	.044*
Currently not in therapy	2 (25%)	6 (75%)	8		
Total	22 (56%)	17 (44%)	39		

p<.05*

The above table illustrates that the groups did not differ with regards to the type of therapy that they had received over the years. However, significantly more individuals in the BPD group were in therapy, at the time of assessment, than individuals in the psychiatric comparison group.

Overall, with regards to descriptive variables and service use, the two groups differed significantly on age, severity of pathology (GSI), amount of therapy that they had had over the years, and whether or not they were in therapy at the time of assessment.

4.2. Coping measures

Having looked at how the two groups differed in terms of descriptive variables and their service use, the next question was *do the two groups differ on the predicted variable of coping?*

Distribution

All the scales on the coping measures (the CISS and the BBCQ) were normally distributed for both groups (skewness and kurtosis statistics were divided by their standard error statistic). Therefore, independent samples t-tests were conducted in order to examine the differences between the two groups with regards to their coping styles and strategies,

Table 5. Means and standard deviations (SD) for coping scores on the CISS and BBCQ scales.

Coping Measure	BPD (n=22)		PCG (n=17)		t (df=37)	Significance (p)
	Mean	SD	Mean	SD		
CISS						
Task	38.86	13.09	44.71	10.91	-1.483	.147
Emotion	60.77	8.26	47.88	11.35	4.109	.0002**
Avoidance	39.27	11.19	41.00	9.19	-.516	.609
Distraction	20.45	6.83	20.82	5.23	-1.85	.855
Social Diversion	13.32	5.30	13.76	4.75	-.273	.787
CISS Total	142.45	22.53	133.59	22.35	1.223	.229
BBCQ						
Adaptive	30.86	8.71	36.59	8.039	-2.103	.042*
Behaviourally Dysregulated	75.64	10.38	53.88	5.96	5.148	<.0001**
Other Risky Behaviour	22.18	8.02	13.76	2.73	4.59	.0002**
BBCQ Total	158.27	16.59	136.59	24.12	3.326	.002**

p<.05*, p<0.01**

Table 5 illustrates that individuals in the BPD group scored significantly higher than the comparison group on the Emotion Focused coping scale of the CISS, on the Behaviourally Dysregulated and Other Risky Behaviour coping scales of the BBCQ and on the total BBCQ. Individuals with BPD also scored significantly lower than the comparison group on the Adaptive coping scale of the BBCQ. This indicates that individuals with BPD use more dysfunctional coping strategies and less constructive/helpful coping strategies when confronted with a stressful situation, than a psychiatric comparison group. Although the difference between the two groups' scores on Task Focused coping (CISS) was not significant, there was a trend in the data that individuals in the BPD group scored lower on the Task Focused coping scale than individuals in the psychiatric comparison group. Interestingly there was almost no difference between the mean scores for both groups on Avoidance Focused coping on the CISS, or the two subscales Distraction and Social Diversion.

The BPD group scored above the 76th percentile for Emotion Focused coping on the CISS, but below the 50th percentile on the other CISS scales, compared to other psychiatric female patients. The psychiatric comparison group scored below the 50th percentile on all the scales of the CISS. This appears to indicate that the BPD group uses predominantly emotion focused coping strategies in response to stress, while the psychiatric comparison group appears to employ few coping strategies.

In order to examine whether the differences between the two groups' coping scores could be accounted for by differences in age, degree of psychopathology (GSI), length of time in therapy, and whether or not they were in therapy at the time of assessment,

analyses of covariance (ANCOVAS) were conducted. These controlled for the above mentioned variables.

Table 6. The effect of group on participants' scores on the coping measures, when descriptive and treatment variables were controlled for (ANCOVAS).

	df	F	Significance (p)
Coping Measure			
CISS			
Emotion Focused	1, 33	5.972	.020*
BBCQ			
Adaptive	1, 33	1.545	.223
Behaviourally Dysregulated	1, 33	12.74	.001**
Other Risky Behaviour	1, 33	12.81	.001**
Total BBCQ	1, 33	6.414	.016*

p<.05*, p<0.01**

Table 6 illustrates that after controlling for age, length of time in therapy, whether or not participants were in therapy at the time of assessment and GSI scores, there was still a significant effect of group for all of the scales except for the Adaptive coping scale.

The above table also shows that the significantly higher scores of the BPD group on the Emotion Focused coping scale of the CISS, the Behaviourally Dysregulated coping scale, the Other Risky Behaviour coping scale of the BBCQ and the total BBCQ score, were not accounted for by descriptive or treatment variable differences between the two groups. The fact that the BBCQ significantly distinguishes between the coping styles of the BPD group and a group of individuals with mental health problems, but not BPD, is consistent with the hypothesis that the BBCQ measures coping in BPD and indicates that the BBCQ may have predictive validity.

The next step was to examine whether the Behaviourally Dysregulated, Other Risky Behaviour scales of the BBCQ and Total BBCQ coping scales measured something additional to the Emotion Focused Coping scale of the CISS. ANCOVAS were therefore used to control for Emotion Focused coping, when comparing the two groups' scores on these scales (Table 7).

Table 7. The effect of group on participants' scores on the Behaviourally Dysregulated coping, Other Risky Behaviour coping scales and the total BBCQ score, when Emotion Focused Coping is controlled for.

	df	F	Significance (p)
BBCQ Scales			
Behaviourally Dysregulated	1,36	7.67	.009**
Other Risky Behaviour	1,36	11.569	.002**
Total BBCQ	1,36	1247.388	.079

p<.05*, p<0.01**

The effect of group on the total BBCQ was no longer significant after Emotion Focused coping was controlled for. However, the difference between the two groups on the Behaviourally Dysregulated coping scale and the Other Risky Behaviour coping scale remained highly significant when emotion focused coping was controlled for. This indicates that, as hypothesised, these scales provide different or additional information to the Emotion Focused scale of the CISS.

To summarise, individuals in the BPD group scored significantly higher than the comparison group on the Emotion Focused scale of the CISS and the Behaviourally Dysregulated coping scale, Other Risky Behaviour coping scale of the BBCQ and on the total BBCQ score. The difference between the two groups on the Behaviourally Dysregulated and the Other Risky Behaviour scales of the BBCQ remained highly

statistically significant even when the descriptive treatment variables and the Emotion Focused coping scale of the CISS, were controlled for. This indicates that the BBCQ probably measures coping in BPD and that, as predicted, the Behaviourally Dysregulated coping scale and the Other Risky Behaviour coping scale are measuring something additional to, or different from, Emotion Focused coping on the CISS.

Coping and psychopathology

For descriptive purposes (in order to illustrate the relationship between severity of BPD and coping and severity of psychopathology and coping within each group) the correlations between the coping scales, the SCID II and the GSI, are provided in Table 8.

Table 8. Pearson's r correlations between the coping scales and the SCID II and GSI for both groups.

	SCID II		GSI	
	BPD (n=22)	PCG (n=17)	BPD (n=22)	PCG (n=17)
Coping Measure				
CISS				
Task	-.077	-.006	-.168	-.191
Emotion	.050	.106	.456*	.229
Avoidance	-.043	.145	-.218	-.328
Distraction	-.161	.392	-.138	.092
Social Diversion	.219	-.071	-.115	-.450
BBCQ				
Adaptive	-.039	.038	.171	-.156
Behaviourally Dysregulated	.241	.096	.242	.487*
Other Risky Behaviour	.374	.394	-.014	.372

p<.05*

Table 8 shows that severity of BPD, as measured by the SCID II is not significantly correlated with coping in either group. However, severity of psychopathology is

significantly correlated with Emotion Focused coping in the BPD group and with Behaviourally Dysregulated coping in the comparison group.

4.3 Attachment measures

This section of the results focuses on attachment style in the two groups.

It was hypothesised that individuals in the BPD group would score higher on the preoccupied and disorganised scales, of the Attachment Q-sort, than the comparison group with regards to their attachment to their primary caregiver. The following analyses tested this hypothesis.

An initial examination of the data revealed that except for the disorganised attachment scale, the attachment variables were normally distributed in both groups. Looking at the distribution of disorganised attachment scores for the comparison group, the skewness statistic was 3.93 and the kurtosis statistic was 5.71. On closer examination there appeared to be one individual in the comparison group whose score on disorganised attachment was more than 3 standard deviations from the mean. This individual was therefore identified as an outlier. As the disorganised attachment score was computed by multiplying the preoccupied and dismissing attachment scores, it was concluded that all data relating to this case should be removed from any analyses involving the attachment data. Following the removal of the outlier from the data, tests showed that the skewness and kurtosis statistics indicated normal distribution. Independent samples t-tests were therefore carried out in order to test for differences between the two groups with regards to their attachment to their primary caregiver.

Table 9. The means and standard deviations for both groups' scores on the Attachment Q-sort scales.

	BPD (n=22)		PCG (n=16)		t-value (df = 36)	Significance (p)
Attachment Style	Mean	SD	Mean	SD		
Secure	1.21	.70	1.41	.73	-.850	.401
Preoccupied	1.76	.47	1.42	.58	2.01	.052
Dismissing	1.18	.77	1.02	.61	.495	.498
Disorganised	1.97	1.29	1.32	.88	1.74	.091

As table 9 illustrates, no significant differences were found between the two groups on any of the attachment styles. However, individuals with BPD scored lower on secure attachment than the comparison group and higher on preoccupied, dismissing and disorganised attachment. Although not significant, the difference between the two groups' scores on both preoccupied and disorganised attachment approached significance. This is in line with the hypothesis that the two groups would differ with regards to preoccupied and disorganised attachment.

As there were no significant differences between the two groups in attachment scores, it was concluded that differences between the two groups' scores could not be said to be accounted for by differences in attachment.

The relationship between attachment and coping within the BPD and psychiatric comparison groups.

Although attachment style could not account for the difference in coping between the two groups, correlational analyses were conducted (for descriptive purposes) in order to examine whether attachment and coping were related in each group.

Table 10. The Pearson's r correlations between attachment style and coping style for both groups.

After correcting for the large number of correlations by dividing .05 by the number of correlations run (64), the significance level became $p < .0008$.

	Attachment Q-sort scales (n=38)							
	Secure		Preoccupied		Dismissing		Disorganised	
	BPD (n=22)	PCG (n=16)	BPD (n=22)	PCG (n=16)	BPD (n=22)	PCG (n=16)	BPD (n=22)	PCG (n=16)
Coping Measures								
CISS								
Task	.028	-.154	-.527	-.080	.092	.122	-.187	-.076
Emotion	-.125	.225	.166	.392	-.118	.127	-.026	.323
Avoidance	.193	.059	-.079	-.058	-.094	-.201	-.020	-.328
Distraction	.149	.088	.084	.276	-.206	-.114	-.031	.001
Social	.210	.168	-.225	-.128	.009	-.466	-.050	-.591
Diversion								
BBCQ								
Adaptive	.214	.027	-.195	-.110	.161	.285	.089	.090
Coping								
Behaviourally	-.343	.212	.343	.533	-.184	-.095	.036	.245
Dysregulated								
Other Risky	-.235	-.276	.129	.023	-.233	.264	-.172	.185
Behaviour								

$p < .0008^*$

As table 8 shows, at $p < .0008$ there were no significant correlations between any of the coping strategies and attachment styles in either group.

Attachment and psychopathology

For purely descriptive purposes, the correlations between attachment style, the SCID II and the GSI are also provided.

Table 11. Pearson's r correlations between the attachment style of participants in each group and the SCID II and GSI.

	Attachment Q-sort Scales (n=38)							
	Secure		Preoccupied		Dismissing		Disorganised	
	BPD (n=22)	PCG (n=16)	BPD (n=22)	PCG (n=16)	BPD (n=22)	PCG (n=16)	BPD (n=22)	PCG (n=16)
SCID II	-.213	-.261	-.185	-.014	.149	-.014	.033	-.102
GSI	-.030	.024	.129	.343	.293	-.089	.357	.114

There were no significant correlations within the two groups between attachment scores and the number of criteria met on the SCID II, or scores on the GSI. This might indicate that there was not that much variance in the amount of general psychopathology or BPD severity within each of the two groups.

4.4 Post hoc analyses

Attachment

As there were no significant differences between the two groups with regards to attachment style, further analyses were conducted on the group as a whole in order to look at both coping and attachment and the relationship between the two in a sample of individuals with mental health problems.

The sample was examined to see if severity of mental health problems per se rather than severity of BPD related to attachment style in this sample. Correlations were carried out between the number of criteria met on the SCID II and scores on each of

the attachment scales. Correlations were also conducted out between GSI and attachment scores.

Table 12. Pearson's r correlations between attachment scores and the SCID II and GSI.

	Attachment Q-sort scales (n=38)			
	Secure	Preoccupied	Dismissing	Disorganised
SCID II	-.230	.217	.152	.252
GSI	-.079	.326*	.180	.346*

p<.05*

Table 12 shows that attachment scores did not correlate with the number of criteria met on the SCID II across the sample. However, preoccupied and disorganised attachment scores were significantly positively correlated with scores on the GSI across the two groups. This might indicate that there is no relationship between SCID II scores and attachment and that attachment in this sample is related to general psychopathology and not severity of BPD. However, as these are post hoc correlations and the correlation is only significant at p<.05, these values are regarded with a large degree of caution.

Attachment and Coping

Based on research that has demonstrated a relationship between attachment and coping in normal populations and populations with Axis I disorders, it was predicted that attachment style would correlate with coping style across the sample as a whole. Correlations were run between attachment and coping scales. After correcting for the large number of correlations run (32), the p value needed for significance became p<.002.

Table 13. The Pearson's r correlations between the attachment and coping scales.

	Attachment Q-sort Scales (n=38)			
	Secure	Preoccupied	Dismissing	Disorganised
Coping Measure				
CISS				
Task	-.002	-.386	.067	-.216
Emotion	-.032	.405	.055	.239
Avoidance	.152	-.096	-.139	-.131
Distraction	.131	.134	-.182	-.035
Social	.196	-.183	-.159	-.219
Diversion				
BBCQ				
Adaptive	.175	-.245	.152	-.014
Behaviourally Dysregulated	-.121	.532*	-.031	.263
Other Risky Behaviour	-.260	.246	-.056	.059

P<.002*

As table 13 shows, the hypothesis was partially supported. Behaviourally Dysregulated coping and preoccupied attachment were significantly positively correlated.

Coping in the sample as a whole.

In order to explore the relationship between coping and both severity of BPD and levels of general psychopathology, correlations were run between the coping scales and SCID II and GSI scores.

Table 14. The Pearson's r correlations between the SCID II, the GSI and the coping scales of the two coping measures

	SCID II	GSI
Coping Measure (n=39)		
CISS		
Task	-.233	-.250
Emotion	.512**	.475**
Avoidance	-.071	-.271
Distraction	-.039	-.060
Social Diversion	.029	-.249
CISS total	.179	-.001
BBCQ		
Adaptive Coping	-.292	-.098
Behaviourally Dysregulated	.623**	.512**
Other Risky Behaviour	.641**	.267
BBCQ total	.504**	.375*

p<.05*, p<0.01**

Table 14 illustrates that as scores on the SCID II increased, so did scores on the Emotion Focused coping scale of the CISS, and all the coping scales of the BBCQ, except for the Adaptive Coping scale. This indicates that as BPD psychopathology increases so does the use of dysfunctional coping strategies. Scores on the GSI are also correlated with Emotion Focused coping, Behaviourally Dysregulated coping and the total BBCQ score, but not the Other Risky Behaviour score. This might indicate that the Other Risky Behaviour coping score is related specifically to BPD psychopathology rather than to psychopathology in general. The similar correlations between the coping scales and both the SCID II and GSI might indicate that psychopathology as measured by the GSI and severity of BPD as measured by the SCID II overlap.

As a result of the findings so far, it was hypothesised that at least three things might be contributing to explaining the variance in coping in this sample as a whole: 1) Number of BPD criteria met on the SCID II. 2) General levels of pathology as measured by the GSI; and 3) preoccupied attachment.

A series of linear regression analyses were conducted in order to establish what proportion of the variance in coping scores was accounted for by each of the above mentioned variables on the coping scales with which they correlated significantly (Table 15, below). All predictor (independent) variables were entered into the regression simultaneously (Method = Enter). This method of analysis was used because the aim of these regressions was to establish the extent of independence between all the predictor variables.

Table 15. The results of linear regressions examining the effect of SCID II, GSI scores and preoccupied attachment scores on coping scores.

Coping measure (n=38)	df	Adjusted R Square	F	Significance (p)	t	Significance (p)
CISS						
Emotion	3, 34	.318	6.746	.001**		
SCID II					2.090	.044*
Preoccupied Attachment					1.818	.078
GSI					1.352	.185
BBCQ						
Behaviourally Dysregulated	3, 34	.520	14.351	<.0001**		
SCID II					3.403	.002**
Preoccupied Attachment					3.176	.003**
GSI					1.146	.260
Other Risky Behaviour						
Other Risky Behaviour	2, 35	.378	12.235	<.0001**		
SCID II					4.569	<.0001**
Preoccupied Attachment					.858	.397
Total BBCQ						
Total BBCQ	3, 34	.245	4.996	.006**		
SCID II					2.342	.025*
Preoccupied Attachment					1.526	.136
GSI					.574	.570

p<.05*, p<.01**

The above table illustrates that severity of BPD (as measured by the SCID II), severity of psychopathology (as measured by the GSI) and a preoccupied attachment style (as measured by the Attachment Q-sort) accounted for a significant proportion of the variance in coping scores on all the coping scales. These three variables accounted for: 32% of the variance in Emotion Focused coping scores, 52% of the variance in Behaviourally Dysregulated coping scores, 38% of the variance in Other Risky Behaviour coping scores and 25% of variance in scores on the total BBCQ.

However, on the Emotion Focused coping scale of the CISS, only severity of BPD had a significant independent effect (this result is regarded with caution as it is only significant at $p < .05$). Both severity of BPD and preoccupied attachment scores had highly significant independent effects on Behaviourally Dysregulated coping scores. Only severity of BPD had a significant independent effect on the Other Risky Behaviour coping scale and on the total coping score on the BBCQ.

To summarise, it was the increase in number of BPD criteria that individuals in the sample met on the SCID II, rather than the severity of psychopathology per se that influenced scores on the dysfunctional coping scales. This indicates that correlations between GSI scores and coping scores overlapped with SCID II scores. In addition, preoccupied attachment scores accounted for a significant proportion of variance in Behaviourally Dysregulated coping scores. This indicates that as hypothesised, there is some relationship between attachment and coping in this sample of individuals with mental health problems and that there are two seemingly independent pathways to coping in this sample, number of BPD criteria met and a preoccupied attachment style.

DISCUSSION

Summary of findings and interpretation of results.

5.1 Coping

This research set out to answer the research question:

Is there a relationship between attachment and coping in BPD?

On the basis of a review of self-report measures of coping, and of the literature on BPD, the researcher concluded that, in order to address this question, it was necessary to develop a measure that would identify the specific coping strategies used by individuals with the disorder. Therefore, in order to answer the main research question, the first question that needed to be addressed was:

Does a new scale developed to measure coping in BPD (the BBCQ) measure something qualitatively different than standard measures of coping (e.g. the CISS)?

It was hypothesised that the BBCQ would differentiate coping in the BPD group from coping in the psychiatric comparison group, above and beyond differences picked up on the CISS. It was predicted that this difference would be directly related to the diagnosis of BPD and not to general levels of psychopathology.

This hypothesis appears to be supported by the results. As predicted, the BPD group and the psychiatric comparison group differed significantly with regard to their scores on the two coping measures (Table 5). Individuals in the BPD group scored significantly higher than the psychiatric comparison group on the Emotion Focused coping scale of the CISS, all the scales of the BBCQ, and the total BBCQ score. This

difference remained significant for the Emotion Focused coping scale of the CISS and the Behaviourally Dysregulated coping scale, Other Risky Behaviour coping scale and the total BBCQ coping score, when descriptive and treatment variables were controlled for (using ANCOVAS) (Table 6). This finding is consistent with previous research that has demonstrated a specific association between BPD, Emotion Focused coping and dysfunctional/avoidance coping (Vollrath et al, 1994).

Differences between the two groups, on the Behaviourally Dysregulated and Other Risky Behaviour coping scales of the BBCQ also remained significant when Emotion Focused coping was controlled for (Table 7). This indicates that both these scales measure something other than, or in addition to, Emotion Focused coping. This finding also appears to provide support for the hypothesis that the BBCQ measures coping in BPD.

Are the BBCQ and the CISS actually measuring coping in individuals with BPD?

Post hoc analyses looking at the sample as a whole revealed: 1) A significant correlation between SCID II scores and the dysfunctional coping scales of the BBCQ (Table 14) and 2) that SCID II scores accounted for a highly significant amount of the variance in coping scores, on the above mentioned scales (Table 16). As a result of the strength of the relationship between coping and severity of BPD it could be argued that rather than the Behaviourally Dysregulated and Other Risky Behaviour coping scales of the BBCQ measuring coping in BPD, they are measuring BPD itself. However, the highly significant correlations between the BBCQ scales and CISS scales, demonstrated in the BBCQ pilot study, lend strong support to the hypothesis that the BBCQ is in fact measuring coping.

One way of attempting to untangle the relationship between the BBCQ and BPD further, would be to examine the relationship between specific criteria on the SCID II and correlations with patterns of responses on the BBCQ. Another way of doing this and continuing to develop the BBCQ would be to attempt to eliminate items from the measure that could be linked to the diagnostic criteria. This would avoid reactivity (the measurement of the same construct twice) and would then enable the investigation of whether or not the BBCQ would still work as a measure of coping in BPD.

Unlike the significant correlations found between coping and the SCID II, in the post hoc analyses, no correlations were found between the SCID II and the coping measures within the BPD or psychiatric comparison group, on the planned analyses comparing the two groups (Table 8). This difference in pre and post hoc findings might be accounted for by the fact that: 1) SCID II scores did not vary much within either group; 2) the variation in SCID II scores is not easily detectable in such a small sample size, which is why it is evident in post hoc analyses; and 3) the SCID II has primarily been designed as a categorical measure of the presence or absence of PD rather than a continuous measure of the severity of the disorder(s).

Correlations between scores on the coping scales and the GSI within each of the groups, were also largely non-significant (Table 8). The fact that there is no unique, significant relationship between levels of psychopathology and the coping scores is supported by the results of the post hoc regression analyses (Table 15). The regression analyses demonstrated that SCID II scores, and not GSI scores, accounted for a significant proportion of the variance in coping scores (on the dysfunctional coping

scales of the BBCQ, the total BBCQ and the Emotion Focused coping scale of the CISS). This indicates that while coping, as measured by standard coping measures such as the CISS, may be related to general psychopathology, as hypothesised, coping as measured by the BBCQ is related to severity of BPD.

Whether or not coping can be teased out from the symptoms of BPD, when dysfunctional coping strategies are closely linked to the diagnostic criteria, remains to be seen. In the meantime the BBCQ remains a potentially useful measure. In addition to its usefulness in answering the research questions posed in this study, the BBCQ may also be a valuable tool for clinicians who wish to identify patients' coping strategies prior to treatment, and changes in coping during and after treatment. The value of the BBCQ as a clinical outcome measure will need to be confirmed in future research.

Does the BBCQ add to our understanding of coping in BPD beyond what can be obtained from the CISS?

The CISS profiles of the BPD and psychiatric comparison groups are described below.

Both groups scored below the 50th percentile for Task Focused coping on the CISS. Although the two groups did not differ from each other significantly, the psychiatric comparison group scored higher than the BPD group on the Task Focused coping scale of the CISS and significantly higher than the BPD group on the Adaptive coping scale of the BBCQ. The low scores of both groups on the Task Focused coping scale is consistent with research findings that individuals with Axis I disorders, e.g. depression and panic (Roy-Byrne et al, 1992) and individuals with personality

disorders (Vollrath et al, 1994) employ fewer problem focused coping strategies. It is also consistent with the view that active passivity in relation to problem solving is a feature of BPD (Linehan, 1993a).

The psychiatric comparison group showed a relatively flat profile, scoring below the 50th percentile (compared to other female psychiatric patients) on all scales of the CISS. The BPD group also scored below the 50th percentile for Task and Avoidance coping but scored at the 76th percentile for Emotion Focused coping. As mentioned already, this finding is in line with a study by Vollrath et al (1994) which found an association between BPD and Emotion Focused coping. It also indicates that the CISS can distinguish between a BPD and non-BPD group with regards to at least some emotion focused coping strategies. However, in this study, it appears that the CISS cannot distinguish between the two groups with regards to Avoidance coping. Differences between the two groups' scores on the Other Risky Behaviour coping scale of the BBCQ show that this is not necessarily because the two groups used the same avoidance coping strategies in response to stress. (See Avoidance coping below).

The low scores of both groups on most of the CISS coping scales probably reflects the fact that the norms for the CISS female psychiatric patients (presented in the manual) were obtained from an inpatient sample. It is likely that an inpatient psychiatric sample (by virtue of requiring inpatient care) would have higher levels of psychopathology and use more dysfunctional coping strategies than the outpatient sample that participated in this study. It is also possible that the low scores on the CISS, in the psychiatric comparison group, indicate the comorbid presence of a

personality disorder as active passivity in Axis I disorders has been associated with the presence of a personality disorder (Roy-Byrne et al, 1992).

How can we understand why the BBCQ identified difficulties in avoidance coping when the CISS did not?

As mentioned above, there were almost no differences in the two groups' scores on the Avoidance coping scale of the CISS (Table 5), yet the two groups differed significantly in their scores on the Other Risky Behaviour coping scale. This pattern of results suggests that individuals with BPD differ from other individuals, with mental health problems, in the avoidance coping strategies that they use. It is proposed that the CISS does not examine the specific avoidance coping strategies of individuals with BPD, but that the BBCQ does (e.g. extreme avoidance behaviours such as getting drunk, taking drugs, having sex with strangers & threatening others). If this were the case it would provide support for the Other Risky Behaviour scale as a measure of avoidance coping in BPD. Further support for this hypothesis comes from research which reports that whilst cognitive avoidance coping is widely used in anxiety and depression (Billings & Moos, 1984) avoidance behaviours and emotionally laden displays are more evident in individuals with BPD (Vollrath et al, 1994). This may indicate that while individuals with BPD use cognitive avoidance, avoiding thinking about something is not in and of itself sufficient to allow the individual with BPD to escape the source of their stress and/or emotional distress. As a result, they also employ extreme avoidance coping activities. This is supported by research which reports that individuals with BPD have difficulties processing emotions and are more sensitive to negative emotions (Levine et al, 1997; Richman & Skolove, 1992)

Whether the Behaviourally Dysregulated coping scale provides additional information about emotion focused coping in BPD, measures additional avoidance coping strategies, or both, remains to be seen in further analyses of the factor structure of the questionnaire (see section on future research).

How might we understand the relationship between BPD and coping in this study?

There is a strong relationship between dysfunctional coping and BPD in this study. This indicates that individuals with BPD convey a picture of major coping deficits under conditions of stress. This broadly matches the findings of other studies into coping in Axis I and Axis II disorders. However, because this study is correlational by design the exact nature of the relationship between BPD and coping cannot be established. Three possible relationships between coping and BPD are addressed below.

1) BPD is dysfunctional coping.

By definition, the DSM IV criteria for BPD involve difficulties coping with stress and regulating emotions. It is therefore possible that BPD could be defined as a failure to implement appropriate coping strategies in response to the stresses of life. The significant role of coping in BPD makes this an important hypothesis to consider, albeit one that is not well supported by the research. A study by Vollrath et al (1996) found that while specific configurations of coping strategies predicted specific personality disorder diagnoses, the amount of variance accounted for by coping in each of the PD scales reached a maximum of 29%. It therefore seems likely that, while dysfunctional coping styles play a significant role in BPD, dysfunctional coping

cannot explain all of the problems experienced by individuals diagnosed with the disorder. Other factors such as personality, temperament and attachment style may also predict coping style (See section on attachment).

The results of this study cannot extricate dysfunctional coping from BPD, thus highlighting the need for further research in this area. What the results of this study do show is that while dysfunctional coping strategies are common to mental health problems, there is a specific relationship between emotion focused coping and BPD, and between extreme avoidance coping behaviours and BPD. The above research by Vollrath et al (1996) goes one stage further by examining the relationship between coping and each PD and this needs replicating in further studies.

2) Dysfunctional coping and BPD coexist independently, as a result of having the same underlying psychosocial causes.

This hypothesis is also not well supported by the research. A study by Vollrath et al (1995) has shown that changing an individual's coping strategies has an impact on the symptoms of their personality disorder. If BPD and dysfunctional coping were independent entities then changing an individual's coping strategies would have no effect on their symptoms. This research was designed on the premise that dysfunctional coping strategies were significant in BPD because they have an impact on the personality disorder and vice versa. To some extent, the conceptualisation of the relationship between dysfunctional coping and BPD as interactive, could be said to be justified by the post hoc analyses in this study, which show a strong relationship between the dysfunctional coping scales of the BBCQ and scores on the SCID II. The size of these correlations makes it unlikely that two independent constructs were being measured.

3) *The relationship is highly interactive, with dysfunctional coping partly causing and partly maintaining BPD.*

At the current time, the research evidence seems to indicate that this is the most likely relationship between coping and BPD. The negative impact of avoidance coping strategies, and of emotionally labile responses to stress, have been demonstrated by longitudinal studies (Bolger, 1990; Felton & Revenson, 1984). (This has been discussed in the introduction in terms of spirals of increased stress and distress, caused by avoided or poorly managed situations). Vollrath et al (1995) also found that dysfunctional coping strategies, such as aggression and emotional venting, ‘aggravated’ personality disorders (including BPD), while problem focused coping and seeking appropriate social support predicted positive change in the personality disorder.

It is beyond the scope of this study to demonstrate the developmental pathway of dysfunctional coping and its impact on the development of BPD. To do this would necessitate prospective studies. However, this study could provide a potential research tool to track changes in coping alongside changes in the disorder. The replication of the study by Vollrath et al (1995) with the BBCQ as an additional measure, might be a way to further examine the relationship between dysfunctional coping and BPD.

Although studies looking at coping and Axis I disorders, and a study into coping and PD provide support for the idea that BPD and dysfunctional coping are related and have a reciprocal effect on each other, this research cannot provide a definitive answer about the relationship between coping and BPD. What it can do is highlight potential

areas for further research and provide a possible research tool (the BBCQ) to aid in carrying out that research.

Does dysfunctional coping in BPD represent a deficit of skills?

Finally, whilst dysfunctional coping strategies appear to be central to BPD some caution is exercised in reaching the conclusion that coping in BPD can be explained by a purely deficit model. Recent research prospectively examined the course of BPD over a period of 6 years (Zanarini et al, 2003). The authors found that although a quarter of individuals with BPD never went into remission, 73.5% of the participants (n = 290) did, and only 5.9% of those in remission experienced a recurrence of the disorder. Despite the high remission rate the BPD group remained symptomatically distinct from the comparison group (other Axis II disorders). Certain impulsive symptoms appeared to resolve the quickest (e.g. promiscuity, but not binge eating, verbal outbursts or spending sprees), followed by cognitive and interpersonal symptoms. Affective symptoms were the most chronic. The authors hypothesised that remission was related to individuals with BPD feeling understood, which somehow facilitated the learning of more adaptive ways of handling their symptoms, which in turn led to actual changes that were not lost over time. (They do not suggest what made these individuals feel better understood, although the majority of participants in this study were in therapy).

Their interpretation of the findings supports the deficit model of coping in BPD. However, an alternative hypothesis is considered on the basis that affective symptoms were found to take the longest to resolve in BPD. This finding is consistent with both the biopsychosocial (Linehan, 1993a) and attachment theories of BPD (Fonagy,

2000), which view emotion dysregulation as the central feature of the disorder. It could be hypothesised that individuals with BPD do not have global deficits in coping but that stress leads to emotional dysregulation, which interferes with the individual's ability to select an appropriate coping strategy. This leads to the individual choosing a coping strategy that they believe will provide the quickest escape route from the situation and/or their emotional distress. One of the effects of emotion dysregulation may be to prevent the individual considering the longer-term impact of short-term coping strategies. This would be consistent with the view that in many situations, individuals with BPD display an 'apparent competence' (Linehan, 1993a) that leads others to think that they are better able to cope with situations than they turn out to be under conditions of stress.

It might also indicate that emotion focused coping strategies are functional, allowing the individual to avoid some stress or distress that is perceived to be greater than that of the emotion focused coping strategy chosen. This hypothesis needs further exploration because it might explain the overlap between emotion focused and avoidance coping in BPD. In addition, a clinical implication of this hypothesis would be that in order to alter dysfunctional coping strategies in BPD it is necessary to teach distress tolerance and emotion regulation strategies. This is similar to the approach taken to the treatment of BPD, by DBT and CBT.

5.2 Attachment

The second stage in answering the question ‘does attachment style correlate with coping style in individuals with BPD?’ is to identify a valid and reliable method of measuring attachment. This research utilised a new method of measuring attachment, the Attachment Q-sort.

Do individuals with BPD differ from a psychiatric comparison group with respect to their attachment style?

Based on previous literature on attachment, two hypotheses were identified. The first hypothesis was that the BPD group and the psychiatric comparison group would differ with regards to preoccupied and disorganised attachment. This hypothesis was not supported by the results obtained with this small population studied. There were no significant differences between the two groups with regards to attachment style (Table 9).

However, the difference between the two groups’ scores on preoccupied attachment and disorganised attachment approached significance. This trend in the data is consistent with the hypothesis that individuals in the BPD group would score higher than the psychiatric comparison group on the preoccupied and disorganised scales of the Attachment Q-sort. It is also consistent with attachment models of BPD (De Zulueta, 1999; Fonagy, 2000) and the research into attachment and BPD, where preoccupied attachment and the sub classification of disorganised attachment have most commonly been assigned (Patrick et al, 1994; Fonagy, et al. 1996). It appears that the most likely explanation for the lack of a significant difference is that there is not enough power due to the small sample size (Type 2 error).

Are the attachment results explained by the use of a new attachment measure?

Alternatively, one could argue that it is not sample size but the lack of sensitivity of the Q-sort, or the use of only one Q-sort attachment target that has resulted in failure to find a significant difference between the two groups.

In relation to the question of the sensitivity of the Attachment Q-sort, it has been demonstrated that the AAI can discriminate between two groups of 12 individuals with BPD and 12 individuals with dysthymia (Patrick et al, 1994). Although the groups were smaller than the groups in this study, individuals in the BPD group met 7 out of 8 DSM III criteria for BPD and those in the dysthymic group met none of the criteria for BPD. In the current sample, no such clear distinction was made between the two groups. Almost all of the participants in the comparison group met a number of criteria for BPD, and individuals in the BPD group met between 5 and 9 criteria for the diagnosis. This makes it more likely that, in this study, a larger sample size would be required to find significant differences between the two groups. It is therefore hypothesised that sample size, rather than the insensitivity of the Attachment Q-sort, is the reason that significant differences in preoccupied and disorganised attachment scores were not found between the BPD and psychiatric comparison group. One way of exploring this hypothesis further would be to administer both the Attachment Q-sort and the AAI in a sample where both Axis I and Axis II disorders are controlled for.

The fact that the two groups did not differ with regards to either secure or dismissing attachment is also unlikely to be due to the insensitivity of the Attachment Q-sort. It is probably explained by the high degree of psychopathology in the psychiatric

comparison group, which is a result of insecure attachment relationships in childhood - a major aetiological factor in many models of mental illness.

The fact that similar, if not significant, results to other studies of attachment were found makes it highly likely that, in a larger sample, the Attachment Q-sort would be effective at discriminating between attachment styles in a BPD group and a psychiatric comparison group. Concurrent research by Fonagy and colleagues (in preparation) comparing attachment classifications on the AAI and attachment styles as measured by the Attachment Q-sort, indicates that it is a reliable measure of adult attachment styles. The data trends also provide support for the hypothesis that attachment can be measured as a continuous rather than a categorical variable. Further research is needed to assess the impact of using one target attachment figure on the sensitivity of the Attachment Q-sort.

Is attachment related to psychopathology?

Within the two groups there were no significant correlations between attachment style and number of BPD criteria met on the SCID II, or severity of psychopathology as measured by the GSI (Table 11). This may reflect the minimal variance in BPD severity and general psychopathology within each of the groups. Post hoc analyses of the entire sample also indicated that there appeared to be no significant relationships between any of the attachment styles and SCID II scores (Table 12). Bearing in mind the relationship demonstrated between attachment and BPD in previous research, it is likely that that this outcome is due to the sample size.

The post hoc analyses showed a small but significant correlation between scores on the GSI and the preoccupied and disorganised attachment styles of the Attachment Q-sort (Table 12). This finding is consistent with other research that has demonstrated a relationship between attachment style and severity of psychiatric symptoms as measured on the GSI (Fonagy et al, 1996), and with Bowlby (1973) and Schore's (1994) suggestion that parental misattunement is a precursor to psychopathology. However, this finding must be treated with caution as this is a post hoc correlation and only significant at $p < .05$. It could therefore be the result of a Type 1 error. (Alternatively, as already discussed, this may be a reflection of the overlap between severity of BPD and severity of psychopathology, because the GSI is a more sensitive measure than the SCID II in a small sample).

5.3 Attachment and Coping

The second hypothesis was that attachment and coping scores would be correlated in BPD. As there were no differences in attachment scores, this relationship could only be looked at via descriptive within group correlations. (Table 10).

These analyses showed that after correcting for the large number of correlations run, there were no significant correlations between attachment and coping within either of the groups.

As a number of studies have demonstrated a relationship between attachment and coping, in individuals with mental health problems, it was hypothesised that attachment, as measured by the Attachment Q-sort, and coping, as measured by the CISS and BBCQ, would be correlated in the sample as a whole. In order to test this hypothesis, post hoc analyses were conducted (Table 13).

Post hoc correlations, corrected for the large number of correlations, run showed that there was a significant relationship between preoccupied attachment and Behaviourally Dysregulated coping scores (Table 13). This provided support for the hypothesis that there was a relationship between attachment and coping in this sample. It also appears to demonstrate that the Behaviourally Dysregulated and Other Risky Behaviour scales differ, as no correlation was found between preoccupied attachment and the Other Risky Behaviour coping scale.

On the basis of the results so far, it was hypothesised that three separate factors: preoccupied attachment style, number of BPD criteria met on the SCID II, and GSI scores would account for some of the differences in coping scores in this sample. Therefore regression analyses were conducted. The analyses showed that SCID II scores accounted for a significant proportion of the coping variance in Emotion Focused, Behaviourally Dysregulated, Other Risky Behaviour coping and the total BBCQ score. Preoccupied attachment also accounted for a significant proportion of the variance in Behaviourally Dysregulated coping (Table 15). This is similar to findings in the Mikulincer et al (1993) study which indicated that there was no significant main effect of preoccupied attachment for problem focused coping but that there was for emotion focused coping (which was approaching significance in this sample at the less stringent $p < .05$ level of significance). There was no significant main effect of GSI scores for any of the coping scales. This provides support for the hypothesis that severity of BPD, rather than severity of psychopathology per se, influenced the BBCQ coping scores. This also provides further support for the hypothesis that the BBCQ scales are measuring coping in BPD.

What might account for the relationship between attachment and coping and BPD and coping in this sample?

Post hoc analyses indicated two independent pathways to dysfunctional coping in this sample: severity of BPD and a preoccupied attachment style. However, evidence from previous research indicates that these pathways may converge in a larger sample of individuals with BPD.

The relationship between preoccupied attachment and Behaviourally Dysregulated coping may reflect the fact that individuals who are preoccupied in their attachment style have a pattern of viewing the world in which the past and present become confused (Fonagy, 2000). Confusion about the meaning of early experiences leads to the individual being unable to remain angry at their caregivers, for abuse and/or a lack of sensitivity to their internal world, long enough to process this anger or their anxiety about the abuse happening again. This confusion may be related to the fact that the individual has inhibited her capacity for mentalisation (thinking about the mental states of oneself or others) so that she does not have to consider her caregivers' ambivalent or negative feelings towards her (Fonagy, 2000). Inhibiting her capacity for mentalisation means that, as well as being unable to think about others' mental states, she does not learn to make sense of her own internal world. As a result of this confusion these individuals are more prone to emotion dysregulation in stressful situations. Cassidy (1994) reported that individuals with a preoccupied attachment style are hypervigilant to sources of stress and have a tendency to emotion escalation. They use coping strategies that reflect both this tendency to emotion escalation and their internal working models of themselves as unable to cope with life's adversities (Onigbene & Collins, 1998). They may therefore be passive in response to stress, trying to find someone to rescue them from the situation, or use escape-avoidance

coping strategies to escape the situation or regulate their intense emotional distress e.g. by self-harming.

The relationship between dysfunctional coping and BPD can be conceptualised within the biopsychosocial theory, of BPD, in terms of emotion dysregulation. Biological predisposition, personality and temperament interact with an invalidating environment. An environment in which the child's internal world is left unlabelled or negated by parental responses. As the process is not modelled by caregivers, she fails to learn how to recognise or regulate her own emotional responses, oscillating instead between emotional inhibition and disinhibition (Linehan, 1993a). This is also likely to lead to the development of negative core beliefs e.g. 'I am unlovable' (Beck et al, 1990).

The child predominantly learns strategies that enable her to cope with parental misattunement or abuse (in the hope of limiting the destructiveness of her environment) (Jacobvitz & Hazan, 1999). As the child becomes an adult this will affect how she deals with stress. She may have a limited coping repertoire and when she encounters a stressful situation, such as the perceived threat of abandonment, she may become overwhelmed with emotional distress. As a result, she is unable to access appropriate coping strategies. Instead, she may lash out at others, hoping to control their behaviour without being able to consider how this will affect the other person and therefore the relationship. The destructive impact of this behaviour on the relationship is likely to feed into her core beliefs about being unlovable and worthless. Emotional sensitivity and lability are themselves a source of stress, which leads to the individual engaging in emotionally dysregulated or extreme avoidance behaviours, in order to escape the source of her distress. Unfortunately, in many instances these

attempts at coping with the original stress through using one emotion to displace another or cognitive and behavioural distraction/distancing, exacerbate the situation and a vicious cycle is set up explaining the unrelenting crises that are characteristic of the individual with BPD (Linehan, 1993a).

5.4 Overview of findings

The findings of this study indicate that dysfunctional coping in BPD (as measured by the BBCQ) can be distinguished from dysfunctional coping in Axis I disorders. This provides information that may lead to a better understanding of the process of coping in BPD and the management of stressful situations by patients with BPD. Modern coping research could offer a theoretical and empirical framework for the beliefs, coping responses and defence mechanisms regarded as an integral part of the clinical presentation of individuals with BPD.

Although not significant, the data trends in this study broadly concur with the findings of studies into attachment and BPD that preoccupied and disorganised attachment are associated with the disorder. While the relationship between attachment and coping in BPD could not be satisfactorily investigated, a relationship between attachment and coping was found in the sample as a whole. The relationship between attachment and coping in BPD needs further investigation and, as with any study, the findings of this research need replicating.

5.5 Strengths and limitations of the study.

The strengths of this study include the use of validated and commonly used symptom measures, such as the SCL-90 and the BDI, a well researched diagnostic measure of BPD the SCID II, and a reliable and valid measure of coping the CISS. In addition, the use of a psychiatric comparison group rather than a normal population allowed for severity of psychopathology to be controlled for, a factor which proved to be relevant in the interpretation of this study.

This study has several limitations that need to be taken into account when interpreting the results. The first limitation is the small sample size, which restricted the statistical power of tests. This is particularly the case with regards to the attachment related hypotheses, where it seems highly likely that with larger numbers the two groups would have scored significantly differently on the preoccupied and disorganised attachment scales of the Attachment Q-sort. This then might have enabled further analysis of the relationship between attachment and coping in BPD. In addition, the large number of correlations conducted increased the likelihood of finding relationships between variables that only exist as the result of chance (Type 1 error).

The second limitation was the composition of the psychiatric comparison group, which was not homogenous with regard to participants' diagnoses. Although 16 out of the 17 individuals in the comparison group had a diagnosis of mood related Axis I disorders, one individual had a primary diagnosis of Obsessive Compulsive Disorder. Four individuals were diagnosed with bipolar disorder, which presents differently from other Axis I depressive illnesses and has been shown to be commonly comorbid with personality disorders (Brieger et al, 2003). Five participants in the psychiatric comparison group were diagnosed with additional anxiety related problems, including

Generalised Anxiety Disorder and Panic Disorder. However, the BPD group also had comorbid diagnoses, including anxiety disorders (e.g. agoraphobia) and mood disorders. Although keyworkers were asked for individuals without concomitant Axis II disorders, and the BPD section of the SCID II was administered to all participants, due to time constraints neither group was screened for other Axis II Personality Disorders or Axis I disorders. It is possible that having individuals in the comparison group with comorbid personality disorders might have reduced the likelihood of finding any differences between the two groups. The design of the study would have been improved if both the SCID I and SCID II interviews for Axis I and Axis II disorders, had been administered. However this would have considerably lengthened the assessment procedure and may have further reduced the number of potential participants willing to take part in the study. Studies that have controlled for Axis I and Axis II disorders have demonstrated a unique relationship between attachment and BPD (Nickell et al, 2002). The difference found, in other studies, when Axis I and Axis II disorders have not been controlled for is that avoidant attachment emerges as a predictor of BPD features. However, in this study no direct correlation was found between SCID II scores and attachment scores.

Another possible limitation of this study is that participation was restricted to females. Although this decision was made because the majority of individuals who receive a diagnosis of BPD are female (DSM IV, APA, 1994) and because it reduced variation in the sample, the fact that only female participants were recruited to this study potentially reduces the generalisability of the findings to males with BPD. As there have been suggestions that male and female individuals with BPD are in some ways characteristically different (Zanarini et al, 1998), it is possible that different results

might have been found in a male sample. In addition, only outpatients with BPD were recruited to the study and the findings may be different if this study is replicated on an inpatient sample.

The use of a new measure of coping in BPD, the BBCQ, could be regarded as both a strength and a weakness of this research. A strength, because it helps to elaborate the specific coping responses of individuals with BPD to stressful situations and provides a potential tool for assessment and evaluation of therapy. A weakness, because as discussed above the large correlation between SCID II scores and the dysfunctional coping scales of the BBCQ means that, at this stage in the development of the BBCQ, a definitive answer to the question: is the BBCQ measuring coping or severity of BPD, or both? cannot be provided. The correlation between SCID II scores and coping scores highlights the complexity of the overlap between coping and BPD and the need for further research to explore the relationship between emotion dysregulation, attachment and coping in BPD.

The BBCQ could also be criticised, as the CISS has been, for dividing coping into too few scales, which subsume other coping responses under their heading. However, having a large number of scales appears to increase the risk of the questionnaire having an unstable factor structure (e.g. the WCQ) (Endler & Parker, 1999).

A further criticism of the BBCQ is that the first two scales only account for 26% of the variance within the questionnaire, which is low, and that the third scale was added on a logical and clinical basis rather than on statistical grounds. However, the high internal reliability of the scales, the initial examination of convergent validity with the CISS, and the significant differences found on the BBCQ between a BPD and non-BPD sample, provide support for the BBCQ as a coping measure. Further

investigation of the scales in a BPD population will hopefully increase the variance in the questionnaire accounted for by the first two scales, or provide support for the addition (or removal) of BBCQ items, scales and subscales.

As already discussed, this study could be criticised for using the SCID II as a continuous as well as a categorical measure. However, at the current time there is no well-validated continuous measure of BPD.

An additional potential strength and weakness of the study is the method of assessing attachment styles. As reported in the introduction, the best method of measuring attachment styles is a matter of ongoing debate. A number of measures have been developed, including the AAI. The degree of convergence between measures is not completely clear (Stein et al, 1998) although comparative studies suggest that different measures converge if they use the same method and conceptual framework and focus on the same domain (Sperling, Foelsch & Grace, 1996).

This research could be criticised for using a new measure to assess the attachment styles of the sample, particularly because of the addition of the, as yet unvalidated, disorganised attachment scale. However, a current study is comparing the Attachment Q-sort to the AAI in clinical populations. The initial reliability and validity data for the Attachment Q-sort, is good and further supported by the similar findings of other studies looking at attachment and BPD (Bartholemew & Horowitz, 1991; Fonagy et al, 1996; Patrick et al, 1994). The decision to add the disorganised attachment scale to the Attachment Q-sort was made on a sound theoretical (Zulueta, 1999) and statistical basis. It also appears to be supported by the trend in the data that, as in studies using

the AAI, individuals with BPD score higher or are classified as disorganised more frequently than individuals without the diagnosis. Three of the main strengths of the Attachment Q-sort are that: 1) It was developed on the basis of research which has shown that dimensional models of adult attachment fit the data better than typological models (Fraley & Waller, 1998). 2) It distinguishes between items that measure attachment and items that measure liking and disliking an attachment figure; and 3) Attachment styles are not rated on the basis of the researchers' interpretation of participants' accounts of their relationship, but on the basis of where items are placed in the pyramid. Therefore, any bias present when the researcher is not blind to the diagnosis is prevented.

Finally, although the Attachment Q-sort was designed to look at attachment relationships with a number of attachment figures, in this study the assumption was made that the attachment relationship of most significance would be the relationship with the primary caregiver. This sample was too small to test the hypothesis that it did not matter who the caregiver was, as long as they were the primary caregiver (i.e. mother, father, foster parent, or aunt) and further research might test this hypothesis. In addition, a few individuals in the sample rated attachment figures that were no longer alive and the effect of this on attachment ratings might be an area of further research.

5.6 Clinical Implications

This study indicates that the BBCQ could eventually provide clinicians with a way of assessing the preferred responses to stress of an individual with BPD coming into therapy. This would enable therapists to tailor a treatment plan to the specific coping strengths and weaknesses of the individual concerned and to monitor change in the coping strategies that they use throughout therapy. The evidence that individuals with BPD respond to stressful situations differently from a psychiatric comparison group also provides support for current treatments that include skills training and problem solving as part of the therapeutic approach (e.g. DBT and CBT). The use of problem focused coping has been linked to more positive outcomes in treatment and individuals with BPD appear to use few problem focused coping strategies. An approach consistent with the findings of this study, that emotion focused and avoidance coping behaviours are significant in BPD, is taken in the group therapy module within DBT (Linehan, 1993b). DBT skills are taught and practiced in four areas: 1) Emotion regulation, including the identification of emotions so that individuals can learn ways to prevent themselves becoming overwhelmed by their distress. 2) Interpersonal problem solving, which includes discussion and role-play of different ways to manage challenging interpersonal situations. 3) Mindfulness, which involves practicing techniques that enable the individual to experience the current moment without getting caught up in thoughts about the past or future, which tend to lead to the escalation of distress. 4) Distress tolerance, which is like a first aid kit for emotional distress. Distress tolerance is taught with the aim of helping the individual to replace destructive behaviours e.g. self-harm with more helpful, self-soothing techniques. The BBCQ could also be used as a tool for measuring outcome in therapeutic approaches such as DBT and CBT.

Although the above discussion has focused on the clinical relevance of this research to DBT, a strong argument could be made for teaching both problem solving and specific coping skills to individuals with Axis I and other Axis II disorders. This research supports the findings of other studies that individuals with mental health problems use few helpful coping strategies when faced with stressful situations. In fact, in this study the psychiatric comparison group appeared to use few coping strategies at all, helpful or unhelpful.

Taken in the context of previous research into attachment and BPD, this research indicates that individuals with BPD are likely to be more preoccupied and disorganised in their attachment style than a psychiatric comparison group. Measures of attachment could be used at the start of therapy to provide information about what the therapist might expect in terms of the therapeutic relationship and how they might manage the relationship. For instance, preoccupied patients with extreme fears of abandonment may flip between idealising (attaching too quickly) and denigrating the therapist (dropping out of therapy).

Overall, the implication of these findings may be that for change to occur and for helpful coping strategies to be employed by the individual with BPD, an environment that replicates a secure attachment relationship is needed. Clinicians might have to focus on strategies that enhance a patient's attachment security in order to reduce the BPD pattern of emotion focused coping. Farber et al (1995) argued that therapy within a safe, bounded environment imitates the secure caregiver-child relationship and that this facilitates emotional processing. According to Winnicott (1965)

attunement and responsiveness (similar to validation in DBT) offer a holding environment for the emotions of the BPD patient. The therapist models appropriate emotional responses which are eventually internalised by the individual with BPD, perhaps through the development or rekindling of mentalisation (Fonagy, 2000). As a result, primitive defence mechanisms such as splitting and projection are gradually replaced. Therapy is used to allow the patient to understand the way that they function in the world outside the therapy room (Schore, 1994).

Although attachment related treatment goals had been discussed in the literature for many years (Bowlby, 1980), until recently little empirical research informed this discussion (Slade, 1999). This research indicates that one of the reasons that treatments for BPD, such as POPH, CAT and DBT, may be effective is because they focus on providing a secure environment by replicating a secure attachment relationship, which facilitates the regulation of emotions.

In conclusion, it could be argued that the most effective treatment for BPD might be one that focuses on the building of a secure attachment relationship, which facilitates emotion regulation and either teaches or enables the facilitation of the use of helpful coping strategies and problem solving skills. This is a hypothesis that needs testing by the evaluation of different treatments and their component parts. However, it is possible that the teaching of problem solving skills within therapy might be an effective approach to take.

5.7 Suggestions for future research

There are a number of areas of potential further research that emerge from this study.

1) Further development of the BBCQ.

Continued investigation of the reliability and validity of the questionnaire is needed. The questionnaire needs to be factor analysed again on a suitably large population of individuals with BPD to see if the factor structure remains the same and if there is a statistical justification for the Other Risky Behaviour Scale. Further studies of the discriminant, criterion (concurrent and predictive) validity need to be undertaken, as does an investigation of the test-retest reliability of the questionnaire. Items also need to be removed and additional items may be added to improve the amount of variance accounted for by the first two factors. Finally, research into the reactivity of the questionnaire needs to be undertaken.

2) Research into the Attachment Q-sort.

At present, research comparing attachment styles as measured by the AAI and the Q-sort in clinical populations is underway. Further research that is relevant to this study might include: a) The tracking of changes in attachment patterns of patients across the course of therapy; b) research into whether it makes a difference if individuals rate a different Attachment Q-sort target as their primary caregiver, and whether or not it matters if the individual is alive or dead, in order to test the assumption made in this study that this would not affect the results; c) research into the reliability and validity of the disorganised attachment scale.

3) As this study was unable to adequately examine the relationship between attachment and coping in BPD, further research into the relationship between these two constructs should be conducted in a larger sample in which Axis I and II disorders are controlled for.

4) Further investigation of the hypothesis that dysfunctional coping in BPD is the result of: a) a coping deficit associated with the disorder, b) an inability to problem solve in stressful situations, due to emotion dysregulation, or c) a combination of both.

5.8 Conclusion

This study investigated the following hypotheses:

1) Individuals with BPD would cope differently from a psychiatric comparison group on a new measure of coping in BPD.

2) Individuals with BPD would differ in their attachment to a primary caregiver, from a psychiatric comparison group, with regards to preoccupied and disorganised attachment.

3) That there would be a relationship between attachment and coping in BPD.

The data from this study supports the hypothesis that individuals with BPD cope differently from a psychiatric comparison group, using more emotion focused coping, Behaviourally Dysregulated and extreme behavioural avoidance responses to distress.

The study also provides preliminary support for the hypothesis that the BBCQ measures coping in BPD.

Individuals with BPD did not differ significantly from a psychiatric comparison group with regards to their attachment style. However, the trend in the data was consistent with previous research that has shown that, preoccupied and disorganised attachment are associated with a diagnosis of BPD.

A relationship between attachment and coping was demonstrated in the sample as a whole. Preoccupied attachment scores accounted for a significant proportion of the variance in scores on the Behaviourally Dysregulated coping scale of the BBCQ. It is therefore concluded that if the two groups had been larger, it might have been possible to demonstrate a specific relationship between attachment and coping in BPD. This hypothesis needs to be investigated with further research.

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Appendix A & B

APPENDIX A
BBCQ pilot study

- A1. The BBCQ**
- A2. Information sheet for participants**
- A3. Demographic sheet**
- A4. Ethical approval**

A1

BBCQ

Participant Number: _____

Date: _____

Instructions: The following are ways people react to various difficult, stressful or upsetting situations. Please circle a number from 1 to 5 for each item. Indicate how much you engage in these types of activities when you encounter a difficult, stressful or upsetting situation.

	Not at all			Very Much	
1. I try to talk to someone about the situation	1	2	3	4	5
2. If I need it, I ask for help	1	2	3	4	5
3. I hide away at home	1	2	3	4	5
4. I use breathing, relaxation, prayer or meditation techniques	1	2	3	4	5
5. I say soothing/reassuring things to myself	1	2	3	4	5
6. I pretend that the situation is not happening	1	2	3	4	5
7. I get angry	1	2	3	4	5
8. I break things	1	2	3	4	5
9. I make a plan of how to solve the problem or to feel better	1	2	3	4	5
10. I take steps to solve the problem/feel better	1	2	3	4	5
11. I do something that I enjoy	1	2	3	4	5
12. I threaten other people	1	2	3	4	5
13. I think about physically hurting other people	1	2	3	4	5
14. I physically hurt other people	1	2	3	4	5
15. I wait for my distress to lessen before I take action	1	2	3	4	5
16. I focus on whatever activity I am doing	1	2	3	4	5
17. I think about physically hurting myself	1	2	3	4	5
18. I physically hurt myself	1	2	3	4	5
19. I take more of my prescribed medication	1	2	3	4	5
20. I take more medication not prescribed for me	1	2	3	4	5
21. I take more street/illegal drugs	1	2	3	4	5
22. I accept the situation as it is even if I don't like it	1	2	3	4	5
23. I think my options through carefully	1	2	3	4	5
24. I binge/restrict my food	1	2	3	4	5
25. I get drunk	1	2	3	4	5
26. I pamper/treat myself	1	2	3	4	5
27. I take exercise	1	2	3	4	5
28. I watch a film	1	2	3	4	5
29. I go to sleep	1	2	3	4	5
30. I steal something	1	2	3	4	5
31. I go for a walk	1	2	3	4	5
32. I have sex with strangers	1	2	3	4	5
33. I have unprotected sex	1	2	3	4	5
34. I do something to make me smile/laugh	1	2	3	4	5
35. I listen to the opinions or thoughts of people I respect	1	2	3	4	5
36. I put myself in a dangerous situation	1	2	3	4	5
37. I retreat into my own head	1	2	3	4	5
38. I draw strength from difficult situations that I have managed in the past	1	2	3	4	5
39. I worry/ruminate but do nothing	1	2	3	4	5
40. I spend time planning how to die	1	2	3	4	5

	Not at all			Very Much	
41. I wish that I was dead	1	2	3	4	5
42. I remind myself that I won't always feel this bad	1	2	3	4	5
43. I put my own needs first	1	2	3	4	5
44. I panic	1	2	3	4	5
45. I attempt suicide	1	2	3	4	5
46. I cry	1	2	3	4	5
47. I blame myself for what has happened	1	2	3	4	5
48. I blame someone else for what has happened	1	2	3	4	5
49. I find that I don't know what I am doing/I did for a period of time	1	2	3	4	5
50. I tell myself that I can't cope	1	2	3	4	5
51. I tell myself that I am useless	1	2	3	4	5
52. I tell myself that it is alright to feel sad/worried	1	2	3	4	5
53. I shout at someone	1	2	3	4	5
54. I think about how someone I respect might manage the situation	1	2	3	4	5
55. I verbally attack someone	1	2	3	4	5
56. I tell myself that I can cope	1	2	3	4	5
57. I try to find someone to solve the problem for me/rescue me.	1	2	3	4	5
58. I become increasingly distressed	1	2	3	4	5
59. I try not to let anyone know that I am stressed or upset	1	2	3	4	5

Please list any other coping strategies that you use in stressful situations that have not been mentioned above.

A2



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INFORMATION SHEET

Managing Stressful Situations

Sian Barnett, and Dr. Janet Feigenbaum

Sub Department of Clinical Health Psychology, University College London

- We are conducting a study to look at what different populations of people do in stressful situations.
 - The results of this study will hopefully add to our knowledge and understanding of the ways in which individuals with and without mental health difficulties respond to stressful situations.
 - It is hoped that this study will provide information that will help to improve treatment techniques and the evaluation of treatment techniques for individuals with emotion regulation disorders such as Borderline Personality Disorder.
 - If you decide to take part, you will be asked to provide some basic demographic information about yourself, e.g. your age and gender. You will not be asked to provide any information that would identify you in any way.
 - You will also be asked to complete two questionnaires. Both of which will ask questions relating to the different things that people might do when faced with a stressful situation.
 - Completing both the questionnaires will take you approximately ten minutes.
 - Most people find that the questionnaires are quick and easy to complete and it is hoped that you will not find either of the questionnaires distressing but please do not complete them if you are worried that answering any of the questions might upset you.
 - If for any reason you do become upset whilst completing these questionnaires then you can stop at any time. If you wish to talk to someone about what has upset you, then please contact Dr Feigenbaum (Clinical Psychologist) on the telephone number below.
 - All data from this study will be anonymous. Any publications that arise from this study will not identify individuals in any way.
- **You do not have to take part in this study if you do not want to. If you decide to take part you may withdraw at any time without having to give a reason.**

All proposals for research using human subjects are reviewed by a research ethics committee before they can proceed. This proposal was reviewed by the Joint UCL/UCLH Committees on the ethics of Human Research .

If you have any questions about this study, please contact:

Dr. Janet Feigenbaum tel: 020 7679 5964
write to: Sub Department of Clinical Health Psychology,
University College London, Gower Street, London. WC1E 6BT

A3

In order to maintain confidentiality please do not use your name. Please complete the following information:

Age: _____ Years D.O.B: _____

Marital status:	Single	In a relationship	Married or Cohabiting	Widowed	Separated	Divorced
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sex:	Male	female
	<input type="checkbox"/>	<input type="checkbox"/>

Ethnic background:	White British	White other	Afro-Caribbean	Black - other	Asian - Indian	Asian - other
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other

please specify _____

A4

Co- Chairs:
Mr M Harrison and Dr R MacAllister

The UCL/UCLH Joint Research Committee A
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29 January 2003

Our ref: RM/SB/03A173

DR Janet Feigenbaum
Senior Lecturer in Clinical Psychology
Sub-dept of Clinical Health Psychology
UCL
Gower Street

APPROVED

Dear Dr Feigenbaum

REC Ref. No: **02/0293** (*please quote in all correspondence*)
REC Name: **Committee A** (*please quote in all correspondence*)
Study Title: **The development of a questionnaire looking at the coping strategies of individuals with borderline personality disorder (BPD)**

Thank you for sending your application for ethical review which was received on 19 November 2002. Please accept our apologies of the severe delay in replying to you. The Chairs of the Joint UCL/UCLH Committees on the Ethics for Human Research reviewed your application and gave your application a favourable opinion. The documents reviewed were as follows:

- REC application form
- Information sheet (version 1 dated November 2002)
- Questionnaires (version 1 dated Nov. 2002)
- Research Protocol
- Investigators CVs

There are no ethical concerns and you are therefore given approval, by Chair's Action, for your research on ethical grounds, providing you comply with the conditions of approval set out below. Your application will be ratified at the ethics committee meeting on 27th February 2003.

- You complete the enclosed Data Protection Checklist, to show that your information sheet is compliant with the Data Protection Act 1998, and return it to the ethics office.
- You need to provide the participants with a consent form before you can begin the study. Please send a copy of the consent form you will be giving to participants to the ethics office for our files.
- You do not deviate from, or make changes to, the protocol without prior written approval of the REC, except where this is necessary to eliminate immediate hazards to research participants or when the change involves only logistical or administrative aspects of the research. In such cases the REC should be informed within seven days of the implementation of the change.

- You complete and return the standard progress report form to the REC one year from the date on this letter and thereafter on an annual basis. This form should also be used to notify the REC when your research is completed and in this case should be sent to this REC within three months of completion.
- If you decide to terminate this research prematurely you send a report to the REC within 15 days, indicating the reason for the early termination.
- You advise the REC of any unusual or unexpected results that raise questions about the safety of the research.
- The project must be started within three years of the date of this letter.

NHS REC is compliant with the International Conference on Harmonisation/Good Clinical Practice (ICH GCP) Guidelines for the conduct of trials involving participation of human subjects.

Your application has been given a unique reference number please use it on all correspondence with the REC.

Yours sincerely



Dr Raymond MacAllister
Co-Chair

NB: As of January 2003, all non-NHS research can be sent to the new UCL Ethics Committee.
For more information please contact: **Helen Dougal**
020 7679 7844
h.dougal@ucl.ac.uk

APPENDIX B

- B1. Advert for the psychiatric comparison group**
- B2. The information sheet for women with BPD and the information sheet for the psychiatric comparison group**
- B3. Consent forms for both groups**
- B4. Demographic information**
- B5. Ethical approval**

B1

Sub-department of Clinical Health Psychology
University College London
Torrington Place
London
WC1E 6BT

**VOLUNTEERS NEEDED FOR
PSYCHOLOGICAL STUDY!**

**Attachment, coping and theory of mind
in depressed women**

PAYMENT OF £10

Female volunteers who suffer from depression are needed for a psychological study run by researchers at University College London. The study will involve filling out some pen and paper questionnaires and some computer tests.

The tasks will last for approximately two to three hours with a break for refreshments and will take place at Hunter Street Health Centre or your local day centre.

We hope to gain a greater understanding of Depression, which may help to improve treatment and the evaluation of treatment.

Before asking you to come to the session we will ask you a number of routine questions over the phone to check if we are able to include you in the study.

If you are interested in taking part, please inform a member of staff or leave a message for Amanda Malins or Sian Barnett on 07905 943654 stating the title of the study and your name and a contact number.

B2



Sub-Department of Clinical Health Psychology

UNIVERSITY COLLEGE LONDON

GOWER STREET LONDON WC1E 6BT

Dr Janet Feigenbaum
Senior Lecturer in Psychology
UCL: 020-7679 5964
Code from overseas: +44 20
Fax: 020-7916 1989
e-mail: j.feigenbaum@ucl.ac.uk

INFORMATION SHEET

**“Attachment, coping and theory of mind,
in women who are severely emotionally distressed”**

Sian Barnett, Amanda Malins and Dr. Janet Feigenbaum
Sub Department of Clinical Health Psychology, University College London

- We are conducting a study to look at how women who are severely emotionally distressed view their relationships with the people that raised them, what they do in stressful situations and aspects of their styles of thinking.
- The results of this study will hopefully add to our knowledge and understanding of the severe distress experienced by some individuals and may help to improve treatment techniques and the evaluation of treatment techniques
- If you decide to take part, you will be asked to complete an interview and questionnaires about your symptoms, questionnaires relating to what you do in stressful situations, a questionnaire looking at reasons for other people's behaviour and two computer tasks. Some people find they enjoy completing the tests!
- A small speech sample (5-10 minutes) will be recorded onto tape. The tapes will be labelled with a number (and not your name) and will be erased once the study is completed.
- It is hoped that you will not find any of the tasks distressing. However, if you do we can stop at any time, and if you want, the researcher/clinician will spend time talking to you about what has upset you. You will have the choice of withdrawing from the study, resuming testing after a break or continuing at a later date.
- All data will be labelled with a number in order to preserve anonymity. Any publications that arise from this study will not identify individuals in any way.
- **PARTICIPANTS WILL BE PAID £10**
- There is some flexibility as to where we can meet with you to complete the tasks, including Hunter Street Health Centre, your local Community Mental Health Centre or day hospital, depending on room availability. The session will last approximately two-and-a-half to three hours with a break for refreshments.

This study is not part of normal treatment. You do not have to take part in this study if you do not want to. If you decide to take part you may withdraw at any time without having to give a reason. Your decision to take part or not will not affect your care in any way. Taking part in this research will not interfere in any way with normal treatment nor affect any decisions subsequently made by any service.

All proposals for research using human subjects are reviewed by an ethics committee before they proceed. This proposal was reviewed by Camden and Islington Local Research Ethics Committee.

If you have any questions about this study, please contact:

Dr. Janet Feigenbaum tel: 020 7679 5964
write to: Sub Department of Clinical Health Psychology,
University College London, Gower Street, London. WC1E 6BT

Or leave a message for Sian Barnett or Amanda Malins on 07905 943654



Sub-Department of Clinical Health Psychology

UNIVERSITY COLLEGE LONDON

GOWER STREET LONDON WC1E 6BT

Dr Janet Feigenbaum
Senior Lecturer in Psychology
UCL: 020-7679 5964
Code from overseas: +44 20
Fax: 020-7916 1989
e-mail: j.feigenbaum@ucl.ac.uk

INFORMATION SHEET

**“Attachment, coping and theory of mind,
in women who are depressed”**

Sian Barnett, Amanda Malins and Dr. Janet Feigenbaum
Sub Department of Clinical Health Psychology, University College London

- We are conducting a study to look at how women who are depressed view their relationships with the people that raised them, what they do in stressful situations and aspects of their styles of thinking.
- The results of this study will hopefully add to our knowledge and understanding of depression and may help to improve treatment techniques and the evaluation of treatment techniques.
- If you decide to take part, you will be asked to complete an interview and questionnaires about your symptoms, questionnaires relating to what you do in stressful situations, a questionnaire looking at reasons for other people's behaviour and two computer tasks. Some people find they enjoy completing the tests!
- A small speech sample (5-10 minutes) will be recorded onto tape. The tapes will be labelled with a number (and not your name) and will be erased once the study is completed.
- It is hoped that you will not find any of the tasks distressing. However, if you do we can stop at any time, and if you want, the researcher/clinician will spend time talking to you about what has upset you. You will have the choice of withdrawing from the study, resuming testing after a break or continuing at a later date.
- All data will be labelled with a number in order to preserve anonymity. Any publications that arise from this study will not identify individuals in any way.
- **PARTICIPANTS WILL BE PAID £20**
- There is some flexibility as to where we can meet with you to complete the tasks, including Hunter Street Health Centre, your local Community Mental Health Centre or drop in centre, depending on room availability. The session will last approximately two to three hours with a break for refreshments.

This study is not part of normal treatment. You do not have to take part in this study if you do not want to. If you decide to take part you may withdraw at any time without having to give a reason. Your decision to take part or not will not affect your care in any way. Taking part in this research will not interfere in any way with normal treatment nor affect any decisions subsequently made by any service.

All proposals for research using human subjects are reviewed by an ethics committee before they proceed. This proposal was reviewed by Camden and Islington Local Research Ethics Committee.

If you have any questions about this study, please contact:

Dr. Janet Feigenbaum tel: 020 7679 5964
write to: Sub Department of Clinical Health Psychology,
University College London, Gower Street, London. WC1E 6BT

Or leave a message for Sian Barnett or Amanda Malins on 07905 943654.

B3



Sub-Department of Clinical Health Psychology
UNIVERSITY COLLEGE LONDON
 GOWER STREET LONDON WC1E 6BT

Dr Janet Feigenbaum
 Senior Lecturer in Psychology
 UCL: 020-7679 5964
 Code from overseas: +44 20
 Fax: 020-7916 1989
 e-mail: j.feigenbaum@ucl.ac.uk

CONSENT FORM

“Attachment, Coping Strategies and Theory of Mind in women who are depressed”

Sian Barnett, Amanda Malins, Dr. Janet Feigenbaum,
 Professor Peter Fonagy, Dr. Mary Target

Sub-Department of Clinical Health Psychology, University College London

To be completed by the participant:

- 1. I have read the information sheet about this study YES / NO
- 2. I consent to the researcher recording a 5 minute sample YES / NO
- 3. I have had the opportunity to ask questions and discuss this study YES / NO
- 4. I have received satisfactory answers to all my questions YES / NO
- 5. I have received sufficient information about this study YES / NO
- 6. Which health professional have you spoken to about this study?

.....

7. I understand that I am free to withdraw from this study at any time without giving a reason and without it affecting my future care:- YES / NO

8. Do you agree to take part in this study? YES / NO

Signed: _____

Date: _____

Name in block letters _____

Signature of investigator: _____



Sub-Department of Clinical Health Psychology
UNIVERSITY COLLEGE LONDON
 GOWER STREET LONDON WC1E 6BT

Dr Janet Feigenbaum
 Senior Lecturer in Psychology
 UCL: 020-7679 5964
 Code from overseas: +44 20
 Fax: 020-7916 1989
 e-mail: j.feigenbaum@ucl.ac.uk

CONSENT FORM

“Attachment, coping strategies and theory of mind in women who are severely emotionally distressed”

Sian Barnett, Amanda Malins, Dr. Janet Feigenbaum,
 Professor Peter Fonagy, Dr. Mary Target

Sub-Department of Clinical Health Psychology, University College London

To be completed by the participant:

- 1. I have read the information sheet about this study YES / NO
- 2. I consent to the researcher recording a 5 minute sample YES / NO
- 3. I have had the opportunity to ask questions and discuss this study YES / NO
- 4. I have received satisfactory answers to all my questions YES / NO
- 5. I have received sufficient information about this study YES / NO
- 6. Which health professional have you spoken to about this study?

.....

7. I understand that I am free to withdraw from this study at any time without giving a reason and without it affecting my future care:- YES / NO

8. Do you agree to take part in this study? YES / NO

Signed: _____

Date: _____

Name in block letters _____

Signature of investigator: _____

B4

In order to maintain confidentiality, you will be assigned a code instead of using your name. Please complete the following information:

Identity

Code: _____

Age: _____ Years D.O.B: _____

Marital status:	Single	In a relationship	Married or Cohabiting	Widowed	Separated	Divorced
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ethnicity	White British	White Other	Black Afro-Caribbean	Black Other	Asian	Other
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Education:	Left school before taking 'O' levels / GCSEs	Left school after 'O' levels / GCSEs	Left school after 'A' levels	Finished course in further education
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Employment status:	Not currently in work	Part-time employed	Full-time employed	Voluntary work	Student
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Number of Years in Therapy:

Type of therapy:

B5



**North Central London
Community Research Consortium**

Dr Paul Fox
Research & Development Unit
3rd Floor West Wing
St Pancras Hospital
London
NW1 0PE

E-mail Paul.Fox@camdenpct.nhs.uk

Phone 020 7530 5375
Fax 020 7530 3235

3 July 2002

Ms Sian Barnett
3 Linksvie
Great North Road
East Finchley
London, N2 0PD

Dear Ms Barnett

LREC Ref: 02/54

Title: Attachment and Coping Strategies in Borderline Personality Disorder

I am pleased to note that the Local Research Ethics Committee has recommended to the Trust that there are no ethical reasons why your study should not proceed.

Projects are registered with the North London Community Research Consortium if they utilise patients, staff, records, facilities or other resources of Camden Primary Care Trust, Islington Primary Care Trust or the Camden & Islington Mental Health and Social Care Trust. On the basis of the documentation supplied to us, your study has the support of the clinical service manager/assistant locality director of the service in which it will be based.

The Camden and Islington Mental Health and Social Care Trust therefore grants approval to begin research based on the proposal reviewed by the ethics committee and subject to any conditions set out in their letter of 28 June 2002. Should you fail to adhere to these conditions or deviate from the protocol reviewed by the ethics committee, then this approval would become void. The approval is also subject to your consent for information to be extracted from your project registration form for inclusion in NHS project registration/management databases and, where appropriate, the National Research Register and the UCL Clinical Research Network register.

Permission to conduct research is also conditional on the research being conducted in accordance with the Department of Health Research Governance Framework for Health and Social Care:

- Appendix A to this letter outlines responsibilities of principal investigators;
- Appendix B details the research governance responsibilities for other researchers. It also outlines the duties of all researchers under the Health and Safety at Work Act 1974. Principal investigators should disseminate the contents of Appendix B to all those in their research teams.

Further information on the research governance framework for health and social care can be found on the DH web pages at <http://www.doh.gov.uk/research/>
Staff working within trusts covered by the research consortium can also find the information on the Trust Intranet.

Researchers are also reminded that personally identifiable information on living persons must be collected, stored, processed and disclosed in accordance with the Data Protection Act 1998. Such data may be in the form of electronic files, paper files, voice recordings or photographs/scans/X-rays. Further information on the Data Protection Act is available from your organisations Data Protection Officer or from the Consortium R&D Unit. The Medical Research Council also publishes the guidance booklet 'Personal Information in Medical Research' which is available from <http://www.mrc.ac.uk/pdf-pimr.pdf>

Except in the case of commercially funded research projects, the following acknowledgement and disclaimer MUST appear on all publications arising from your work.

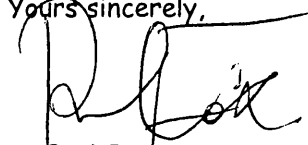
*"This work was undertaken with the support of The Camden and Islington Mental Health and Social Care Trust, who received [***insert "funding" or a "proportion of funding" ***] from the NHS Executive; the views expressed in this publication are those of the authors and not necessarily those of the NHS Executive".*

* "a proportion of funding" where the research is also supported by an external funding body;
"funding" where no external funding has been obtained.

This is a requirement of the contract between the Trust and the NHS Executive in which the Trust receives funding to cover the infrastructure costs associated with performing non-commercial research.

Please make all members of the research team aware of the contents of this approval. I wish you every success with your research.

Yours sincerely,



Dr Paul Fox
Assistant Director of Research and Development

North East London 

Health Authority
The Clock House East Street BARKING
IG11 8EY

Tel: 0208 532 6229 (direct line) (If I am
unavailable please leave message)

Dr. J. Feigenbaum
Senior Lecturer
Sub-Department Clinical Health Psychology
UCL
Gower Street
LONDON WC1E 6BT

10th December 2002

Dear Dr. Feigenbaum

Re: LREC (B&H) 2002/70
Attachment, coping and theory of mind in individual with
borderline personality disorder and a depressed comparison
group

The above-mentioned research application was considered by the Barking & Havering local Research Ethics Committee on the 4th December 2002 and I am pleased to advise you that the Committee was able to approve the ethical aspects of this study without amendment.

The Committee looks forward to receiving a final report of your research findings in due course.

With best wishes for Christmas and the New Year.

Yours sincerely



Mrs. Janett Carter
Administrator to B&H LREC