Evaluating an Alternative Coding Manual for the AAI for use with People with Personality Disorders

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Overview

This study aimed to develop an alternative coding manual for the Adult Attachment Interview for use with a Personality Disordered clinical population. In Part A of this volume I review the literature on Personality Disorder and Attachment. Part B of the thesis consists of the empirical paper which focuses on the development of the manual through establishing the reliability and validity of the revised coding scales. Suggestions to further improve the Affect and Cognition scales of the manual are made following a qualitative analysis of video data from these scales. In the Critical Appraisal, Part C of the thesis, I extend the discussion of the empirical paper to further discuss some of the limitations of the research as well as its implications for the future. I also discuss the process of conducting research in a clinical setting and what I have learned from this process. This project was a joint project and the recruitment, interviewing and coding were conducted by me and two co-researchers: Tanya Lee (Trainee Clinical Psychologist) and Anouschka Buettner (PhD student). The analysis and write up were conducted individually.
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Part 1: Literature Review

A review of the literature on Attachment and Personality Disorder
Abstract

Several theorists have proposed that attachment theory provides a good grounding for the understanding of the development of Personality Disorders (PD). As a result many studies have now used adult attachment measures with this clinical group. The relevance of attachment theory to the development of psychopathology and more specifically of personality pathology has been outlined and the main findings from the research to-date reviewed.

The most consistent finding in the literature is the association between Personality Disorder diagnosis and insecure attachment types. Most research has focused on Borderline PD (BPD). Early studies show an association between preoccupied and fearfully preoccupied attachment types and BPD. High rates of lack of resolution with respect to trauma are also seen in Adult Attachment Interviews (AAI). However, the results of more recent research are less conclusive and suggest that sub-types within the BPD diagnosis may be associated with different attachment styles.

There is less research on other Personality Disorders, and much of this looks across categories rather than at specific Personality Disorders. However, there is some evidence to suggest that Personality Disorders might be divisible along dimensions of attachment avoidance and attachment anxiety.

The range of different attachment measures used in studies makes comparison across studies difficult and the classification of AAI interviews as ‘cannot classify’ is over-
represented in this population. Difficulties in administration of interview based methods and inconsistencies in findings across studies have led to the concern that assessment methods designed for use with normative samples may have reduced reliability and validity with Personality Disorder samples. It is proposed that future research focuses on the development of measures of attachment that draw on specific constructs relevant to attachment in Personality Disordered populations.

1.0 Introduction

Literature on attachment theory and Personality Disorder was found by conducting literature searches using the Psychinfo and Medline data bases. The search terms used were: attachment and personality, Personality Disorder or specific Personality Disorders such as Borderline. Additional papers were found in the reference sections of key studies reviewed. All papers that had used either interview or self-report adult attachment measures with either Personality Disordered clinical participants or with Personality Disorder features in non-clinical samples were included. Papers that were excluded included papers that considered clinical symptoms associated with personality functioning such as sex offending or spousal abuse, but not Personality Disorder specifically.

2.0 Attachment theory

The origins of attachment theory come from the joint work of John Bowlby and Mary Ainsworth (Bretherton, 2000). Bowlby proposed that all organisms display a range of instinctive behaviours that in more complex organisms may be goal-directed and organised into complex plan hierarchies. The functions of these ‘behavioural systems’ are to promote survival and procreation (Bretherton, 2000). Bowlby viewed
attachment as an innate behavioural system that is responsive to environmental demands. He defined attachment behaviour as that which has the intended outcome of promoting the infant’s proximity to the attachment figure and therefore has the evolutionary function of protecting the child from danger (Bretherton, 2000). Throughout the course of infancy these behaviours become focused on the primary caregivers who are the most responsive to the child’s needs. By the time the child is able to move around and explore its environment the infant is able to use the attachment figure as a ‘secure-base’ from which to explore and to return to for protection or comfort (Ainsworth, 1967). From these early attachment relationships in infancy it is hypothesised that the young child comes to construct internalised or mental working models (IWMs) of the interaction patterns that they have experienced with principal attachment figures (Bretherton & Munholland, 1999). These internal working models are ‘operable’ models of the self and attachment partner formed on the basis of experience and serve to regulate, interpret and predict the attachment figure’s and the self’s attachment related behaviour, thoughts and feelings (Bretherton & Mulholland, 1999).

From this theoretical perspective Ainsworth (1978) devised a classification system to measure attachment patterns in young toddlers (12-20 months of age). This is a laboratory based procedure designed to capture the balance of exploratory and attachment behaviours under conditions of gradually increasing stress (Solomon, George, 1999). The procedure involves two periods of brief separation. During these separations and subsequent reunions with the attachment figure the infant is coded into one of four categories, securely attached (B), Anxious: Avoidant (A), Anxious: Ambivalent/resistant (C), and Disorganised/Disorientated (D).
2.1 Adult Attachment - the two traditions

Bowlby predicted that through the expectations formed on the basis of these internal working models of attachment relationships the differences observed in infant-mother attachment would have long-term implications for later intimate relationships, self-understanding and psychological disturbance (Fonagy, 2001). As a result interest has grown into the impact of early attachment experiences on development throughout childhood and into adulthood. Therefore, on the back of the early work into childhood attachment relationships grew two distinct programmes of research into adult patterns of attachment (Bartholomew & Shaver, 1998). In one line of research Mary Main and her colleagues focus on the effects of parental 'states of mind with respect to attachment' on parenting behaviour and the attachment patterns of their young children (see Main, 1996). The development of the Adult Attachment Interview (AAI) followed from the finding that using an interview based method to classify parental mental representations with regards to attachment, strong associations between this classification system and infant behaviour towards the parent in Ainsworth's (eg.1985) Strange Situation could be demonstrated. Since the development of the current AAI classification system (AAI; George, Kaplan & main, 1996), the relationship between AAI classification of parents and the Strange Situation classification of their infants has been demonstrated in over 18 samples (Hesse, 1999), providing evidence that these models of attachment are transmitted intergenerationally from parent to child. In a meta-analytic study of the parent-infant matches in 14 studies using the AAI Van Ijzendoorn (1995) demonstrated a strong effect size (d= 1.06) for an association between parental insecure attachment and insecure classification of the infant in the Strange Situation.
Researchers in this first group tend to think about attachment from a psychodynamic perspective with particular emphasis placed on the development of clinical problems (Bartholomew & Shaver, 1998). Central to this line of research on adult attachment is the notion that, on the basis of repeated experience, the child develops expectations regarding the nature of interactions between themselves and the attachment figure (Fonagy, Steele, Steele, Leigh, Kennedy, Mattoon & Target, 1995). This leads to the formation of an unconscious representation or internal working model (IWM) (Bowlby, 1973) of these relationship patterns, forming a belief system into which early experience is integrated. IWMs can be thought of as cognitive/affective schemas or representations of the self in relation to close relationship partners (Bartholomew & Shaver, 1998). These internal models regulate the child’s behaviour with the attachment figure and eventually, it is proposed, come to organise behaviour in all significant relationships. Research to date supports the prediction that there will be a continuity of attachment security from childhood into adulthood. Two longitudinal studies have reviewed infants classified using the Strange Situation at 18-months with AAI classification in adolescence (Hamilton, 2000) and at 20-years of age (Waters, Merrick, Treboux, Crowell, Albersheim, 2000). In the first a stability rate of 77% was found between secure verses insecure attachment status (Hamilton, 2000), and of 72% in the second (Waters et, al., 2000). Not only is there good evidence for stability of attachment classification from childhood into adulthood but also of the transmission of attachment status from parent to infant.

A second programme of research in the area of adult attachment grew out of the work of Hazen and Shaver (1987) who theorised that orientations to adult romantic
relationships might be an outgrowth of earlier attachment experiences (Bartholomew & Shaver, 1998). From this tradition has grown an array of self-report measures based around Ainsworth’s three infant attachment categories which ask the participant to consider their behaviours and experiences in close romantic relationships. This tradition developed from a personality trait/social psychology theoretical framework and has tended to focus on the influence of attachment on personal adjustment and adult relationships (Bartholomew & Shaver, 1998).

Because the measures derived from both strands of research have been applied to the study of Personality Disorder both research traditions will be considered in this review. However, the limitations of comparing across measures will also be considered.

2.2 Measuring attachment in adults

Measurement of attachment in adulthood from the developmental psychopathology perspective has traditionally focused on interview-based methods of assessment such as the AAI to measure ‘states of mind’ in adulthood with respect to early attachment experiences (e.g. Main and Goldwyn, 1998). These are a function of discourse, coherence and defensive strategy with regard to discussing childhood attachment experiences. Whereas measurement of ‘attachment styles’ from a social psychology perspective (Hazan and Shaver, 1987) have traditionally focused on questionnaire-based methods of measuring an individual’s self-reported style of forming adolescent and adult attachments (Dozier, Stovall, Albus, 1999).
2.2.1 Interview based methods

The current version of the Adult Attachment Interview is a semi-structured clinical interview designed to elicit thoughts, feelings and memories about early attachment experiences and to assess the individual's state of mind or internal working model with regard to early attachment relationships (Main & Goldwyn, 1998). The classification system of the AAI parallels the avoidant, secure, resistant and disorganised categories of the of the infant classification system (Ainsworth, 1985). Therefore, individuals are classified into five categories on the AAI; secure (F), insecure-preoccupied (E), insecure-dismissing (D), and unresolved-disorganised (U), and cannot code (CC) (Main & Goldwyn, 1998). The first three AAI categories are what Main (1995) refers to as organised attachment strategies. In the current version of the AAI participants are coded as secure (F) if they are able to produce a coherent and collaborative narrative regardless of whether the experiences that they are recounting are favourable or not. Interviews are classified as dismissing (D) when the discourse appears aimed at minimising the discussion of attachment experiences. Attachment figures may be presented in a very favourable light but little supportive evidence for this description is offered. Interviews are classified as preoccupied (E) when the interview appears to stimulate memories but the participant seems unable to keep a focus to the narrative or to contain emotional content. For example the participant may give lengthy and angry accounts of childhood experiences that move away from the interview question. The two additional categories are designed to capture either localised disorganisation surrounding discussion of potentially traumatic events, the unresolved (U) category, and the more global breakdown in discourse strategy or failure to maintain an organised discourse strategy across the
whole interview, as captured by the Cannot Classify (CC) category and mirror the
disorganised (D) category of the infant classification system (Hesse, 1999).

Hesse (1999) offers a good review of studies that demonstrate the power of the AAI
to-date including studies that show an association between secure classification and
sensitive and responsive care-giving, studies demonstrating the psychometric
properties of the instrument, longitudinal studies demonstrating an association
between infant Strange Situation behaviour and subsequent AAI classification in
adulthood as well as a growing body of research demonstrating a connection between
insecure attachment on the AAI and adult psychopathology.

Other interview based methods of assessing attachment in adulthood include The
Adult Attachment Q-Sort, an alternative coding system for the AAI (Kobak, 1989)
which assess memories of childhood attachment experiences, and the Current
Relationships Interview (CRI) (Crowell, 1990) which uses a similar format to the
AAI to assess attachment representations in current partnerships. Crittenden (1998)
developed an alternative coding manual for the AAI based on analysis of discourse in
AAI transcripts. It differs from the traditional coding manual through its focus on the
mental processes and self-protective factors of the interviewee, and the intention of
the manual was to capture a greater range of psychological functioning allowing for
discrimination among individuals with psychological disorder. However, it has
proved difficult to establish good reliability on these scales (Crittenden, 2007). The
Prototypes of Adult Attachment Interview (PAI) (Bartholomew & Horowitz, 1991) is
an interview based assessment that uses a four category coding system based around
valuing of the self and valuing of the other in relationships (Crowell & Treboux, 1995).

2.2.2 Self-report measures

A wide range of self-report questionnaires designed to measure attachment in adulthood have been developed (Fonagy, 2001). Some of these measure attachment history and others measure attachment in current adult romantic relationships or other current close adult relationships. These measures generally offer a brief description of general attitudes to relationships and the individual has to pick the response which they feel best represents them (Fonagy, 2001).

One group of self-report measures of adult attachment has emerged from the work of Hazen and Shaver, (1987) who originally developed the Attachment Styles Questionnaire (AAS). This is a self-selection measure that draws on the research from infant attachment studies to capture feelings about the self in romantic relationships using a classification system that parallels the Strange Situation categories of secure, avoidant and ambivalently attached. This scale has since been developed in an attempt to improve its psychometric properties into the Adult Attachment Scale (AAS) (Collins & Read, 1990) and the Adult Attachment Questionnaire (Feeney, Noller & Hanrahan, 1994).

The Relationships Questionnaire (RQ) (Bartholomew & Horowitz, 1991) uses the four category system of the PAI to assess attachment prototypes and the Reciprocal Attachment Questionnaire (RAQ) (West & Sheldon-Keller, 1992) asks the participant to rate the person that they feel most close to in adulthood, excluding
family members. The questionnaire is then rated on dimensions of secure-base, separation protest, proximity seeking, feared loss, reciprocity and availability and use of the attachment figure.

In sum, a wide range of semi-structured interviews and self-report measures have been developed to assess attachment status in adulthood. However, although all of the measures have been developed from a similar theoretical background of research on infant attachment, they have come from two major theoretical traditions and have been developed to assess a number of different forms of attachment relationships, some focusing on historical accounts of early attachment relationships, others on adult peer and romantic attachments. This apparent common theoretical grounding has caused some confusion and has obscured the fact that the measures appear to address very different constructs (Crowell & Treboux, 1995). As a result care should be taken when comparing the results of different measures as the shared terminology suggests overlap in meaning which is not supported by the research (Crowell & Treboux, 1995).

3.0 Overview of attachment and psychopathology literature

3.1 Childhood

Numerous studies of low-risk populations have now looked at the relationship between childhood attachment status in the first 2 years and behavioural and emotional problems of middle childhood but have failed to identify a simple relationship between the two (Greenburg, 1999). However, results for high-risk populations have been more conclusive. The Minnesota Parent-Child Project
(Egeland & Sroufe, 1981; Erickson, Sroufe & Egeland, 1985) followed a sample through childhood into adolescence. Children’s attachment status was measured at both 12 and 18 months and the three category system of classification of the Strange Situation was used (secure/avoidant/ambivalent). Results from follow ups in early elementary school (Renken, Edeland, Marvinney, Mangelsdorf & Sroufe, 1989) and preadolescence (Urban, Carlson, Edeland & Sroufe, 1991) showed that children in high-risk environments were more likely to show poor peer relations, moodiness, and symptoms of aggression and depression than those classified as secure in early childhood. Follow up studies in adolescence showed a link between ambivalent attachment in infancy and anxiety disorder in adolescence (Warren, Huston, Egeland & Sroufe, 1997). In the same sample dissociative disorders in adolescence could be predicted from higher levels of avoidant and disorganised classifications in infancy (Ogawa, Sroufe, Weinfield, Carlson & Egeland, 1997). These authors went back to the original 12 and 18 month Strange Situation data and additionally scored it on Main’s disorganised/ disorientated scale so that disorganised attachment patterns could be included in this follow-up study (Main & Solomon, 1990). Other longitudinal studies have since gone on to show that the infant attachment pattern most closely associated with later problems is the disorganised/ disorientated (D) category (Lyons-Ruth & Jacobvitz, 1999). Studies in early childhood have also shown links between insecure attachment and externalising disorders such as Oppositional Defiant Disorder (ODD). In particular, classification of controlling attachment style, which captures the child’s attempt to actively direct control of the interaction with the parent on reunion in the Strange Situation, has found to be associated with children who met criteria for ODD (DeKlyen, Speltz & Greenberg, 1998).
Not only is there support for an association between attachment insecurity and psychopathology in later childhood and adolescence, but the importance of the unresolved/disorganised category has also been demonstrated in the inter-generational transmission of psychopathology literature. Parent's "Unresolved/disorganised" (U/d) AAI classification has been shown to predict the infant D pattern which has been linked to psychopathology (Hesse & Main, 2000). It was later proposed that infant disorganised behaviour result from an approach-flight paradox that arose in the infant as a result of the caregiver’s frightened or frightening behaviour towards the child (Hesse & Main, 2006).

Although it is unlikely that there is a single cause for most disorders and multiple developmental pathways may lead to the development in childhood of internalising or externalising problems, attachment security appears to act as a risk factor or a buffer for the effects of other risk factors. As such, attachment insecurity itself is not a measure of psychopathology but can be viewed as a risk factor, which alongside other risk factors may set a developmental trajectory that increases the risk for development of disorders (Greenberg, 1999).

### 3.2 Adulthood

Only a couple of longitudinal studies have looked at the direct link between infant attachment and adult psychopathology (Dozier et al., 1999). The only clear connections to emerge from these studies are a link between disorganised attachment in childhood and dissociative symptoms in adolescence (Carlson, 1998) and between resistant attachment and anxiety disorders in adolescence (Warren et al., 1997).
Other studies have considered the link between attachment related circumstances in childhood such as loss of an attachment figure through separation or death and adult psychopathology. Findings indicate an association between depression and early experiences of loss (Dozier et al., 1999), with longitudinal studies indicating that the death of a parent in early childhood puts a child at risk for later depression (Harris, Brown and Bifulco, 1990). Anxiety is related to threats of loss and instability (Monroe & Simons, 1991) and Antisocial Personality Disorder with loss through desertion, separation and divorce (McCord, 1979).

Further studies have looked at the relationship between retrospective accounts of childhood attachment experiences in adulthood and psychiatric classification. Clinical studies with the AAI have shown an association between various disorders and accompanying AAI classifications (Hesse, 1999). One finding that has emerged consistently from these studies is that psychiatric disorders are nearly always associated with insecure states of mind, with unresolved status being the most overrepresented classification among adults with psychiatric disorders (Dozier, et al., 1999).

3.3 Summary of main findings

In sum, longitudinal studies have demonstrated a link between attachment in infancy and psychopathology in middle childhood and adolescence, in high risk populations. There is also strong evidence to suggest that childhood attachment status can be predicted from parental classification on the AAI (Van Ijzendoorn, 1995). These findings suggest that attachment plays a role in the development of clinical problems
and that attachment states of mind can be directly transmitted from parent to child. Studies using the AAI with adult psychiatric populations also show an association between insecure attachment classification and psychopathology in adulthood, although no longitudinal studies currently exist to directly link adult psychopathology with attachment classification in infancy. The evidence, therefore, supports the theoretical view that the internalised models of attachment experience formed in early interactions with attachment figures go on to affect development across the lifespan, and the development of later psychopathology.

A number of studies have considered the link between attachment and Personality Disorder. Research has emerged from both adult attachment traditions; the psychodynamically informed attachment states of mind tradition (e.g. Main, 1996) and the social psychology tradition, looking at adult attachment styles in romantic relationships (e.g. Hazen & Shaver, 1987). These papers are the main focus of this review.

4.0 Personality Disorder

The American Psychiatric Society defines Personality Disorder as “An enduring pattern of inner experience and behaviour that deviates markedly from the expectation of 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”. (DSM-IV, 1994). Ten Personality Disorders are included in the most up-to-date version of the diagnostic manual and each one of these Personality Disorders are conceptualised as deviations from normal in one or more of the following:
(1) cognition,

(2) affectivity

(3) interpersonal functions;

(4) impulsivity.

These are categorised into three clusters: Cluster A which are the odd or eccentric disorders including Paranoid, Schizoid and Schizotypal Personality Disorder; Cluster B which are the dramatic, emotional or erratic disorders including Borderline, Antisocial, Histrionic and Narcissistic Personality Disorders; and Cluster C which are the anxious or fearful disorders and are Avoidant, Dependent and Obsessive-Compulsive Personality Disorders (DSM-IV, 1994).

5.0 Personality Disorder and Attachment

Several theorists have considered attachment theory as a conceptual framework for theories of Personality Disorder (e.g. Bartholomew, Kwong & Hart, 2001; Fonagy, Target, & Gergely, 2000). Bowlby himself saw attachment and personality pathology as related along a developmental pathway or trajectory (Bowlby, 1988b). For instance, he proposed that avoidant attachment might lead to “a blockage in the capacity to make deep relationships, such as is present in affectionless and psychopathic personalities” (Bowlby, 1973). Attachment theory postulates that the quality of early relationships plays an important role in the development of personality and stress tolerance through the formation of internal working models of relationships. These then act as a filter governing what is perceived, felt and remembered about significant events, thus guiding a person’s behaviour in new interpersonal situations (Stalker & Davies, 1995). From a developmental
psychopathology perspective attachment patterns are seen to be the driving force behind the development of complex patterns of social interaction, emotion regulation, and cognitive processing that emerge through the course of development leading to patterns of behaviour and interpersonal functioning that tend to become self-perpetuating into adulthood (Bartholomew et al., 2001).

Attachment is conceptually useful when thinking about key aspects of Personality Disorder such as affect regulation, particularly in close interpersonal relationships. It may play a less central role in explaining other key features of Personality Disorder such as impulse control and disturbances in cognition and perception. Although, a growing body of empirical research has demonstrated a link between attachment security and a child’s ability to understand the appearance-reality distinction, belief-desire reasoning and the nature of false belief (Fonagy, György, Elliot & Target, 2004). The authors posit the existence of an Interpersonal Interpretative Mechanism, that grows out of the attachment relationship enabling the child to understand themselves and others as intentional beings and through the development of which, it is argued, the parent-child relationship plays a crucial role in the child’s cognitive development (Fonagy et al., 2004). Therefore, within the developmental psychopathology framework attachment patterns are not conceptualised as directly causing later adult personality pathology but rather as a risk factor that may place an individual on one of an array of potential developmental pathways, some of which will lead the individual on a developmental trajectory away from normal healthy development (Bartholomew et al., 2001). Also because difficulties in close interpersonal relationships are more central to some forms of personality pathology,
attachment insecurity may play a more important role in the development of some Personality Disorders than in others (Bartholomew et al., 2001).

Particular emphasis has been placed on Borderline Personality Disorder in the attachment literature because Borderline is generally associated with marked instability of affect as well as a ‘preoccupation’ with concerns about current and previous relationship difficulties (Dozier, Stovall & Albus, 1999). This shows consistency with the maximising of expressions of attachment needs seen in resistant infants and adults who are classified as preoccupied in relation to attachment in adulthood. Some theorists have conceptualised Borderline Personality Disorder as a condition of severe attachment insecurity with oscillation between attachment and detachment, yearning for close affectional bonds and fear of rejection or abandonment that leads to dread and avoidance of such close relationships (Sable, 1997) or as a disorder of interpersonal relations (Agrawal, Gunderson, Holmes & Ruth-Lyon, 2004). As a result much of the research in the area of attachment and Personality Disorder has focused on Borderline PD, although a growing number of studies have considered other forms of Personality Disorder from an attachment perspective. The centrality of interpersonal difficulties or patterns in the diagnosis of most Personality Disorder makes attachment a relevant construct when considering most PD from a developmental psychopathology perspective. Therefore literature in the area of BPD will be considered first before going on to review the evidence for an association between attachment insecurity and other forms of Personality Disorder.
6.0 Borderline Personality Disorder

BPD has been by far the most researched Personality Disorder from an attachment perspective. Studies with Borderline participants have focused both on adult relationship styles using self-report methods and states of mind with respect to childhood attachment experiences using the AAI. The findings emerging from studies with this client group and groups with Borderline features will be summarised below.

6.1 Self-report studies:

Several studies have used self-report measures of attachment to classify BPD samples or clinical samples of adolescents with Borderline features. These studies have used a variety of different self-report measures. Some of these have focused on retrospective reporting of childhood attachment relationships, and others have focused on current peer and romantic attachments.

The Relationship questionnaire (RQ), the Relationship Scales Questionnaire (RSQ) and the Reciprocal Attachment Questionnaire (RAQ) all assess current attachment patterns in adult peer and romantic relationships. In an early study using this method of assessment Brennan and Shaver (1998) used a non-clinical sample group of 1407 adolescents and young adults assessed for features of Personality Disorder using the Personality Diagnostic Questionnaire (PDQ-R; Hyler & Rieder, 1987). Their results indicated a substantial overlap between attachment and Personality Disorder measures. The authors considered all 13 Personality Disorders listed in the DSM-III-R (APA, 1987). Their findings with respect to BPD found that 32.2% were fearful,
24.6% were preoccupied 13.4% dismissing and 29.8% were secure (Brennan & Shaver, 1998). Self-report based attachment methods assessing attachment in adult romantic and peer relationships have often been used with adolescent and young adult populations (Grossman, Grossment & Zimmerman, 1999). However, the beginning of adolescence marks a period of tremendous effort to become less dependent on caregiving from primary attachment figures (Allen & Land, 1999), which needs to be taken into consideration when using attachment measures that assess attachment relationships with parents in this age group.

West, Keller, Links and Patrick, (1993) found four scales from the RSQ were significantly associated with BPD, with a significant association demonstrated with high feared loss of attachment figures, low secure base, high compulsive care-taking and high angry withdrawal.

Sperling, Sharpe and Fishler (1991) used the Adult Styles Interview (ASI) with 20 female and 4 male BPD psychiatric inpatients and a student control sample. They found that the BPD group was significantly more likely to endorse the avoidant, resistant/ambivalent and hostile scales than the non-clinical control group. A correlation between BPD and anxious/ambivalent attachment and, in a negative direction, between secure attachment and BPD has been shown using the Attachment Self Report (ASR) (Nickel, Waudby & Trull, 2002) when 393 college students were assessed for Personality Disorder, 2% of whom were demonstrated to meet criteria for BPD.
Although all of these studies have shown an association between insecure attachment styles and BPD in comparison to non-clinical controls, the different self-report measures have used different classification systems making direct comparison across studies problematic. As a result of this other studies have used dimensional measures of attachment style such as the Experiences in Close Relationships scale (ECR), a self-report questionnaire derived from the factor analysis of a number of commonly used self-report attachment questionnaires. The measure provides a two-dimensional model of attachment along the dimensions of attachment-anxiety and attachment-avoidance. One such study used 40 outpatients diagnosed with BPD and a control group of 40 community volunteers (Minzenberg, Poole & Vinogradov, 2006). The SCID-II was used to diagnose PD and the SCID-I to detect axis I co-morbidity. The BPD group were found to have significantly greater dimensional attachment impairment and rate of fearful attachment type compared with healthy controls. Dimensional attachment-anxiety was associated with self-reported childhood sexual abuse and attachment-avoidance with all five childhood maltreatment categories assessed using the Childhood Trauma Questionnaire (Berstein & Fink, 1998). The two attachment dimensions were associated with different patterns of current interpersonal problems, impulsivity subtypes and mood related problems. Therefore the authors concluded that BPD was associated with disturbed attachment patterns on both attachment dimensions, and with higher levels of childhood maltreatment which related differentially to the two attachment dimensions. The results indicated significant heterogeneity in attachment related emotional and behavioural phenomena among BPD patients.
This lack of heterogeneity of attachment style within BPD groups is supported by a more recent study using the ECR (Levy, Meehan, Weber, Reynoso & Clarkin, 2005). This study used a number of self-report measures such as the RQ, RSQ as well as the ECR to measure adult attachment patterns in 99 outpatient participants who were diagnosed with BPD. The results of this study indicated that different subgroups within the BPD diagnosis emerge. Participants who showed greater concern and behavioural reaction to real or imagined abandonment were more likely to be classified as preoccupied, whereas those who showed higher levels of inappropriate anger where more likely to be classified as having an avoidant attachment style and those who were classified as fearfully preoccupied had higher rates of identity disturbance. Therefore, BPD cannot necessarily be considered as a homogenous group as far as attachment style is concerned and the authors concluded that it may be necessary to consider typical and atypical BPD groups when constructing models of attachment (Levy et al., 2005).

Not only is there emerging evidence for a lack of homogeneity of BPD attachment classification using self-report measures but also for a lack of specificity of attachment insecurity and BPD diagnosis, with studies indicating that BPD and other Personality Disorders cannot be distinguished from one another on the basis of attachment classification. In a recent study 44 BPD patients were compared with a non-personality disordered clinical group, a clinical group of other Personality Disordered patients (without BPD diagnosis) and a non-clinical control group (Fossati, Donati, Donini, Novella, Bognato & Maffai, 2001). Personality Disorder was measured using the SCID-II and the ASQ was also administered alongside a measure of parental bonding. Attachment style and parental bonding were found to
discriminate BPD from the non-clinical control group and the clinical control group of patients without PD diagnosis, but not from the group with other PD diagnoses. The authors concluded that the results do not support the claim of a specific role of attachment failure in BPD in comparison to other Personality Disorder diagnoses. A more recent study by the same research department used 466 consecutively admitted outpatients diagnosed with BPD using the SCID-II. They were then given the ASQ and measures of impulsivity and aggression. The results indicated that adult attachment patterns are related to individual differences in personality traits of impulsivity and aggressiveness, which in turn predict BPD features (Fossati, Feeny, Carretta, Graioli, Milesi, Leonardi & Maffei, 2005). Therefore, attachment style can be seen as a mediating factor between BPD diagnosis and key traits associated with it. This finding does not support the claim that BPD is a disorder of attachment insecurity as such (Sable, 1997), but that attachment insecurity is a risk factor for the development of BPD (Bartholomew et al., 2001).

6.1.2 Main findings from self-report research

All studies using self-report measures of attachment style have found a relation between insecure adult attachment styles and BPD when comparison is made to non-clinical controls. Most studies indicate an association between BPD and both fearfully avoidant and preoccupied attachment types. The studies discussed have all used large sample sizes but BPD participants have been sampled from a wide range of sources including community student samples, inpatient and outpatient groups. Two studies which used a measure derived from factor analysis of a number of self-report measures have shown that different attachment styles relate to different presentations of symptomatology within the BPD diagnosis indicating that different
subgroups within the BPD diagnosis need to be considered when constructing models of attachment. One study reviewed argues that the impact of attachment on BPD is mediated through other key behavioural features associated with the disorder such as impulsivity and aggression (Fossati et al., 2005). The one study reviewed which also uses clinical control groups found that attachment style could differentiate BPD groups from non-PD clinical controls but not from a clinical control group consisting of participants with a diagnosis of other PD.

6.2 AAI studies:

Several studies have considered retrospective accounts of childhood attachment relationships or ‘states of mind’ with respect to attachment by using the AAI with Borderline clinical groups. Stalker and Davies (1995) interviewed 40 female psychiatric inpatients with a history of childhood sexual abuse using the AAI. Eight of these participants reached criteria for a primary diagnosis of BPD, of these seven were unresolved with respect to trauma. Only five of the 40 women interviewed did not reach criteria for any Personality Disorder and the majority of participants met criteria for more than one. Overall in this sample of women with a history of sexual abuse 68% were preoccupied and 60% were unresolved with respect to trauma. The high rates of lack of resolution with respect to trauma have also been demonstrated by other AAI studies. (e.g. Patrick, Hobson, Castle, Howard & Maughan, 1994; Fonagy, Leigh, Steele, Steele, Target & Gerber, 1996). All 12 BPD participants interviewed with the AAI in Patrick et al.’s (1994) study were classified as preoccupied with 10 out of the 12 BPD patients classified as fearfully preoccupied and all nine of the BPD participants that had experienced loss or trauma were given a primary classification of unresolved with respect to loss or trauma. A clinical
comparison of 12 dysthymic patients was used in this study. Of these four of the 12 were classified as preoccupied, and none of these were given the sub-category of fearfully preoccupied. In Fonagy et al.’s (1996) study 82 non-psychotic inpatients with case-matched controls were interviewed on the AAI and assessed for psychiatric disorder using the SCID-I and SCID-II. Thirty six of the 82 participants in the inpatient group met DSM-III criteria for BPD. Of these 75% were classified as preoccupied of which 47% were in the subclassification group fearfully preoccupied. This was a statistically significantly higher proportion than was found in the non-clinical control group. A significant relationship was found between diagnosis of BPD and unresolved status. Eighty nine percent of individuals with BPD as compared to 65% of clinical participants without this diagnosis were classified as unresolved with respect to trauma. Barone (2003) interviewed 40 clinical participants with a diagnosis of BPD recruited from the waiting list of a psychiatric hospital and compared them to 40 non-clinical controls from a student population. Significant differences were shown between the clinical and non-clinical groups on all three of the primary dimensions of the AAI using the 4 category system, with the clinical group scoring lower on secure attachment style and higher on preoccupied and unresolved. Dismissing classifications were evident in similar proportions in both groups. Fifty percent of the BPD group compared with 7% of the non-clinical group were classified as unresolved with respect to trauma and it is suggested that the organised/disorganised dimension could be considered a more important risk factor for BPD than security/insecurity dimensions. Barone (2003) concludes that the results support an association between BPD and mental organisations concerning attachment. In a sample of 69 inpatient adolescents with a history of suicidal behaviour or severe ideation 86% reported during their AAI interview that they had
experienced attachment related trauma. Of these, lapses of monitoring whilst discussing trauma was seen in 73%, which was significantly higher than in the clinical control group (Adam, Sheldon-Keller & West, 1996). Preoccupied and unresolved with respect to trauma were the attachment categories most strongly associated with the case group.

In a preliminary study of 10 female outpatients with a diagnosis of BPD tested using the AAI, six of the patients were given a primary classification of unresolved with respect to loss or trauma (U) and one could not be classified (CC). (Diamond, Stovall-Clough, Clarkin & Levy, 2003). Although these numbers are very small the finding was consistent with the larger sample of which these participants were part (Levy, 2002). Levy, Meehan, Kelly, Reynoso, Weber et al., (2006) interviewed 90 BPD participants referred by clinicians in the New York area for a randomised control trial for psychotherapy. Participants were assessed for attachment status using the AAI. Of the 90 participants interviewed 5% were classified as secure, 30% were classified as dismissing, 15% were classified as preoccupied, 31.7% were classified as unresolved with respect to trauma and 18.3% were classified as cannot code. Where secondary classifications were used for U and CC categories 50% were given a secondary classification of preoccupied and 45% of dismissing. Interestingly most secondary classifications for CC were dismissing and for U, preoccupied.

6.2.1 Summary of finding for AAI studies:
Seven studies using the AAI with BPD groups have been reviewed. Of these two have used non-clinical comparison groups and three have used a clinical comparison group. Diamond et al (2003) conducted a small scale preliminary study of 10 BPD
participants which formed a part of Levy et al's (2006) larger scale study of 90 BPD outpatients.

All AAI studies show low rates of secure attachment in BPD groups in comparison to both non-clinical and clinical comparison groups. Findings for earlier studies suggest an over-representation of the preoccupied classification amongst participants with a diagnosis of BPD, with particularly high rates of the sub-category fearfully preoccupied. When a four category classification system is used, including the classification of U, rates between 60-89% in BPD groups were seen for the lack of resolution with respect to trauma (U). However, more recent studies show higher rates of dismissing classification in BPD groups. Studies using the 5 category system which includes the cannot code (CC) category show lower rates of U than earlier studies but 10-18.3% of BPD classified as CC, indicating a more global breakdown in coherent strategy of discourse than is captured by the U category. The elevated rates of lack of resolution with respect to trauma and the global breakdown of discourse associated with the CC classification has led a number of researchers to explore the theoretical importance of these categories in the development of BPD.

6.3 Theory papers on disorganised attachment and BPD.

Due to the high rates of BPD participants classified as unresolved with respect to loss or trauma a number of authors have argued that the roots of the disorder lie in disorganised childhood attachment problems (e.g. Fonagy, Target & Gergely, (2000), Holmes, (2003, 2004)) suggests that there is continuity between the U category of the AAI and the infant D category. Although, the U category may also capture adults for
whom there is lack of resolution for a loss or trauma occurring later in childhood and early adulthood.

Main and Hesse (1990) proposed that disorganised (D) attachment in infancy can be viewed as an approach-avoidance bind. An infant who experiences the frightening or fearful behaviour of the caregiver experiences the caregiver as both the secure base and the source of fear and finds themselves in a bind between seeking comfort from the caregiver and simultaneous fear and avoidance of the caregiver. Holmes (2003, 2004) proposes that this disorganised infant pattern is managed in later childhood by the child becoming controlling of the caregiver leading to a role reversal and providing the child with a pseudo-secure base. This approach-avoidance pattern finally shifts in adolescents and early adulthood to an individual who is controlling and aggressive, with limited capacity to self-soothe and who is liable to dissociation. Holmes proposes that this is the early foundation for a diagnosis of BPD.

Fonagy et al, (2000) argue that infants develop the ability to represent the mental states of attachment figures and the self through early interactions with caregivers through two processes. Firstly children learn to understand through the course of normal development that others have mental states that govern their behaviour. The authors refer to this ability as mentalisation. However, it is proposed that the infant also does not have an innate ability to recognise their own internal states but rather comes to recognise these through the sensitive and accurate reflection of these by the caregiver. When the caregiver’s emotional response to the child is congruent with the child’s internal state it is internalised and a representation of their own mental state is
formed by the child. It is proposed that disorganised infants become hypervigilant to the caregiver’s mental states because they are often associated with frightened or frightening behaviour (Hesse & Main, 2006). The child becomes less able to form accurate representations of self states due to the caregiver’s inability to accurately interpret and reflect back to the infant their emotional states, the caregiver’s frightening or fearful responses to the child conveying the message that their mental states are unmanageable. As such, disorganised infants are likely to become good readers of the caregiver’s mind but poor readers of their own internal states and to actively inhibit mentalisation of their own internal states as a reaction to the perception that these states are unmanageable and overwhelming. Therefore, it is proposed that individuals that experience early trauma may defensively inhibit their ability to mentalise and that this characteristic is the basis of some personality pathology. Fonagy et al., (2000) propose that these processes are particularly relevant to BPD as the unstable sense of self characteristic of the disorder, impulsivity and emotional instability can be associated with deficits in the ability to mentalise self-states. Fears of abandonment, splitting and inaccurate and oversimplified representations of others and associated rigid interpersonal schemata can be conceptualised as the result of the extreme and unpredictable behaviour of early attachment figures.

Later studies have since used the CC classification and found that up to 25% of BPD participants interviewed using the AAI are classified as CC (Diamond et al., 2003; Levy et al., 2006). This classification is used when the interviewee uses multiple, contradictory and un-integrated internal working models (IWM) surrounding attachment figures during the interview and suggests a more global breakdown in
coherent discourse. This finding may suggest that BPD clients show an un-integrated mixture of approach and avoidance strategies beyond the more specific break down in reasoning associated with the U category (Levy, 2005).

6.3.1 Problems with this proposal:

Although lack of resolution with respect to loss or trauma appears to be an important construct in defining the attachment status of BPD, it is not possible to conclude that this is an exclusive mechanism in the development of the disorder. Although early studies showed very high rates of U in BPD groups (Fonagy et al., 1996; Patrick et al., 1994; Stalker & Davies, 1995) more recent studies have shown lower rates and more recently it has been suggested that only roughly half of BPD participants are classified as U (Levy, 2005). Later studies have also shown elevated rates of CC classification in BPD samples, although the rates are still low between 10-18%. The high rates of U classification in clinical groups other than BPD (Dozier et al., 1999) also indicate that the classification lacks specificity in relation to BPD (Levy, 2005).

6.4 Summary

In sum, both self-report and interview based research into attachment and BPD have shown an inverse relationship between attachment security and BPD. Self report measures consistently shown high rates of insecurity in BPD samples but growing evidence suggests that it may be more meaningful to look at subtypes of BPD rather than regarding the disorder as a homogenous presentation. Earlier AAI studies showed elevated rates of fearfully preoccupied attachment in BPD samples, but more recent studies have not found this link to be as strong and higher rates of dismissing classifications have been seen in these samples. High rates of U and CC categories
have also been found in BPD samples interviewed with the AAI, and some theorists have proposed that BPD represents the adult version of attachment disorganisation (Holmes, 2003, 2004). However, by no means are all BPD participants captured by this category and high rates have also been shown in other clinical populations without BPD diagnosis. Overall the results appear to support the proposal that there is more than one route to the disorder.

7.0 Attachment research into other Personality Disorders

Much less research has been done into attachment classification and Personality Disorder other than Borderline (Bartholomew et al., 2001) and most of this research has used self-report measures of attachment style. These studies will be considered first before reviewing the two studies to-date that have used the AAI with other PD.

7.1 Large scale studies across PD clusters

Timmerman and Emmelkamp (2006) examined a range of Personality Disorders in a forensic, prison and community control group setting using the RQ self-report measure to assess attachment classification and the Personality Diagnostic Questionnaire Revised (PDQ-R) self-report assessment measure to classify PD. A semi-structured diagnostic interview was also used with the forensic inpatients to confirm PD diagnosis. The control group was found to be more frequently secure and less frequently fearful than forensic and prison groups. No differences were found in attachment classification between the forensic inpatient and prison groups. Differences between the three groups remained after controlling for other cultural and social factors. In relation to Personality Disorder classification Cluster A was significantly negatively associated with secure attachment status and positively
associated with fearful attachment. Cluster C Personality Disorders were less secure, more preoccupied and more dismissing and more fearful than controls. Cluster B showed strong associations with attachment classifications only when examined separately. Histrionic PD was significantly negatively associated with dismissing attachment. Antisocial PD was significantly associated with dismissing attachment style and BPD with preoccupied attachment. Meyer, Pilkonis, Proietti, Heape, and Egan (2001) assessed 149 psychiatric outpatients. Of these 46 met criteria for one or more Personality Disorders as assessed using a structured clinical interview for DSM-III-R PD (PDS-R). Attachment style was assessed using an attachment prototype methodology (Pilkonis, 1988) which categorises seven styles of secure and insecure attachment types. Secure attachment was found to correlate inversely and moderately with each of the personality scales supporting the theory that there is an overlap between Personality Disorder and attachment constructs. Associations were found between preoccupied attachment prototype and BPD. An association between low preoccupation and high avoidance was found with Schizoid PD and high preoccupation and low avoidance with Dependent PD.

Nakash-Eisikovits et al (2002) used clinician ratings of attachment patterns of adolescents referred with interpersonal difficulties. Secure attachment was found to be negatively correlated with personality pathology and positively correlated with healthy functioning. Secure attachment most strongly negatively correlated with Personality Disorders associated with social withdrawal such as Schizoid, Schizotypal, Avoidant PD. Avoidant attachment was most strongly correlated with the 'odd eccentric' Cluster A PD and anxious/ambivalent attachment was most strongly associated with Borderline PD, Histrionic PD and Dependant PD. There
was a strong positive correlation between the classification of lack of resolution with respect to loss or trauma and all Personality Disorder categories.

7.2 PD features in non-clinical samples
A couple of studies have used non-clinical samples to look for associations between Personality Disorder categories and attachment classification. In Brennan and Shaver’s (1998) study not only did they look at BPD, but also all 10 Personality Disorders listed in the DSM-III-R. As reported above, the study used self-report questionnaires to assess both Personality Disorder and attachment (PDQ-R and RQ respectively). The authors analysed associations between PD and attachment style using a principal component analysis and found that personality disorder scales mapped on to three dimensions, the first two of which were associated with attachment and the third only moderately. The first factor represents general pathology and taps security verses fearful attachment style. The Personality Disorders found to load on to this variable were Avoidant, Schizotypal, Paranoid, Self-defeating, Obsessive Compulsive and BPD. The second factor taps a dismissing attachment style and was named ‘counter-dependence’. The Personality Disorders that loaded onto this dimension were Schizoid (positively), Histrionic and Dependent (negatively). The third factor appeared akin to psychopathy and only moderately associated with attachment factors. It was associated with Anti-social, Passive-aggressive, Sadistic and Narcissistic PDs. However, the participants in this study were a student sample and supposedly within the normal range of personality functioning. The questionnaire used to assess PD was also over inclusive with a high rate of false positives in detecting PD. They concluded that there was much overlap between the concepts of Personality Disorder and attachment.
Meyer, Pilkonis and Beever (2004) used a non-clinical sample of 176 undergraduate students and assessed them for Personality Disorder features using a structured clinical interview for DSM-IV PD, the SCID-II-SQ, and a self-report attachment measure (ECRI). They found that Cluster B Personality Disorder features were related to anxious attachment. Avoidant Personality Disorder features related to avoidant and anxious attachment classification and Schizoid personality features related weakly to avoidant attachment. They conclude that their results support the conceptualisation of BPD as a variant of preoccupied attachment and Avoidant PD as a variant of fearful attachment. It remained unclear as to whether Schizoid PD was better conceptualised as an avoidant or non-attached pattern as the strength of attachment motivation was not measured in the study. The authors concluded that although there was a strong overlap between the constructs of attachment and Personality Disorder, the constructs were not redundant.

7.3 Research looking at Specific Personality Disorders

A few studies have sought to examine or compare specific Personality Disorders. In particular two studies have sought to compare BPD with other Personality Disorders. Aaronson, Bender, Skodol and Gunderson (2006) used the RAQ self-report attachment measure to compare 50 BPD and 40 OCPD recruited from an existing multi-site longitudinal study of PD and assessed them for PD using a semi-structured interview based on the DSM-IV. BPD participants were found to be significantly higher than OCPD on dimensions of angry withdrawal and compulsive care seeking. Previous studies have suggested that this pattern is equivalent to anxious/ambivalent
attachment style (West & Sheldon-Keller, 1992). The BPD group also scored more highly than OCPD participants on sub-dimensions of separation protest, lack of availability of attachment figure, feared loss and lack of use of attachment figure. No clear patterns of attachment emerge for OCPD. The authors consider a limitation of their study to be that there is no normative data for the RAQ attachment scale to indicate secure attachment. These results support attachment theory as a way of theoretically distinguishing Borderline PD and OCPD pathology supporting the view that attachment as a construct may be more important in the development of some Personality Disorders than in others.

Bogaerts, Vanheule and Declercq (2006) used the attachment construct to differentiate between securely and insecurely attached sub-types of child molesters. 84 child molesters were assessed for PD and attachment style using self-report measures (ADP-IV and the Adult Attachment Scale respectively). Thirty three percent of the sample were found to be securely attached and 51 insecure. Eight PDs were found to significantly differentiate the secure and insecurely attached groups but Schizoid PD was found to be the only PD to significantly predict attachment security accounting for 36% variance of insecurely attached child molesters. The research again demonstrates the underlying commonality between PD and attachment constructs. The study’s weakness is that the self-report measures of PD used for Schizoid PD have the lowest measure of construct validity on this scale.

Limited research has attempted to differentiate within PD categories themselves using attachment constructs. Dickenson and Pincus (2003) assessed 532 undergraduate students on the two subtypes of narcissism using the Narcisstic
Personality Inventory (NPI) and the AAQ self-report attachment questionnaire. They found that grandiose narcissism was associated with secure and dismissive attachment styles. The authors argue that these attachment styles are characterised by positive self-representations. Vulnerable narcissism was found to be associated with fearful and preoccupied attachment styles characterised by negative self-representations.

7.4 AAI studies

Two studies have looked at Personality Disorder features and attachment using the AAI. Rosenstein and Horowitz (1996) used the AAI to compare attachment classifications of inpatient adolescents assessed for Personality Disorder using the SCID-P (ref???). Using the four category system for coding the AAI, 38% of the sample were dismissing, 42% preoccupied, 18% unresolved with respect to loss or trauma and only 2% secure. The results showed that the dismissing group differed significantly from the preoccupied group by being more antisocial, Narcissistic and Paranoid with a trend for drug abuse. The preoccupied group was significantly more avoidant with a trend for anxiety and dysthymia and was more likely to have an Obsessive-Compulsive, Histrionic, Borderline or Schizotypal Personality Disorder. This suggests that Personality Disorder as measured by the SCID-P fit broadly along two dimensions relating to dismissing and preoccupied attachment. However, numbers in each of the PD groups were small. Another study using the AAI was conducted on a high economic social status hospitalised adolescent sample matched with high school sample (Allen, Hauser & Borman-Spurrell, 1996). 41% of the hospitalised adolescents met criteria for an externalising disorder (oppositional defiant or conduct disorder). Only 7.6% of the hospitalised adolescents were
classified as securely attached in comparison to 44.7% of the high school sample. Of particular significance were the high rates of adolescents classified as unresolved or cannot classify. The inpatient sample was then followed up 11 years later and it was found that lack of resolution with respect to past trauma and derogation of attachment relationships was related to self-reported criminal behaviour. Hard drug use was also associated with derogation of attachment relationships and an absence of idealisation and preoccupying anger within attachment relationships. Although antisocial Personality Disorder was not assessed as such, the study goes some way to linking antisocial traits with insecure and unresolved attachment styles and with derogation of attachment relationships.

7.5 Dimensionality of attachment categories

Both self-report and AAI studies into Personality Disorder and attachment have shown an association between attachment insecurity and Personality Disorder in adulthood and a number of authors have commented on the overlap between the two constructs (e.g. Meyer et. al. 2004; Brennan & Shaver, 1998). A number of studies have proposed that Personality Disorders fit on to dimensions of attachment insecurity (Brennan & Shaver, 1998, Rosenstein & Horowitz, 1996). This finding has led to the proposal that there is a range of functioning within each attachment pattern (Levy, 2005) and that more and less adaptive forms of dismissing and preoccupied attachment patterns exist which incorporate individuals from non-clinical populations through to those with personality pathology (Levy & Blatt, 1999). These authors proposed that preoccupied attachment runs on a continuum from non-BPD individuals who value attachment, intimacy and closeness, to the gregarious who may exaggerate relatedness, to Histrionic individuals who are overly dependent and
easily show anger in attachment relationships, to those with BPD (Levy & Blatt, 1999). In contrast they propose that avoidant attachment runs along a continuum from individuals without PD who are striving for personal development, to obsessive personalities, to those with avoidant PD, to those with Narcissistic PD and finally those with BPD and antisocial PD (Levy & Blatt, 1999).

7.6 Summary

Studies that have considered multiple categories of Personality Disorder have to-date shown associations between Personality Disorders and attachment insecurity. However, there is as yet little research into individual Personality Disorders other than BPD. The research that has been conducted has used a number of different measures of attachment and has selected Personality Disorder participants from very different populations making it difficult to draw any definitive conclusions about the relation between Personality Disorder in adulthood and attachment experiences. The reliance on self-report measures as a means of assessing PD as well as the observed high co-morbidity between the different Personality Disorders and also with other clinical syndromes in the DSM-IV (Lenzenweger & Clarkin, 1996) also makes it difficult to draw strong conclusions about the association between individual PD and attachment classification. Indeed some research which has considered individual disorders has shown variation within Personality Disorder diagnosis and attachment classification (e.g. Dickenson et, al., 2003; Levy et al., 2005). However, it has been proposed by a number of authors that Personality Disorders fit into a dimensional model of attachment (e.g. Brennan & Shaver, 1998; Rosenstein & Horowitz, 1996) and that within this different levels of attachment functioning, perhaps operating at
different key periods in development, may contribute to a range of personality pathology (Levy, 2005).

8.0 Problems with the assessment of attachment in Personality Disorder populations

Although a large body of research has developed using adult attachment measures with Personality Disorder the research so far has demonstrated a complicated relationship between attachment and adult personality pathology. Inconsistencies in classifications within particular PD groups have been shown across studies and there is growing evidence that a large proportion of PD participants fall within the CC classification on the AAI (e.g. Levy, 2005).

Research in the area of attachment and Personality Disorder has shown that systematic relationships between attachment insecurity and personality pathology have been difficult to establish using traditional attachment coding measures. The lack of specificity of attachment patterns to particular disorders and the high comorbidity of Personality Disorders between each other and with the DSM-IV Axis I disorders make it difficult to draw strong conclusions. The numerous different attachment measures used in studies from different research traditions makes comparison across studies problematic.

8.1 Future research

There is much scope for research into the associations between particular Personality Disorders and attachment as studies that have looked in depth at any one PD other than BPD are lacking, and where there is a body of research it is difficult to draw specific conclusions. To-date researchers have attempted to fit attachment patterns
seen in high risk groups into descriptors developed for normative populations (Agrawal, 2004) with limited success. Not only have PD samples proved difficult to classify using traditional adult attachment measures but they can also cause procedural difficulties in the application of semi-structured interview methods such as the AAI that threaten the reliability and validity of the measure (Turton, McGaulay, Marin-Avellan, Hughes, 2001). Turton et al. (2001) reviewed interview transcripts drawn from Personality Disordered offenders detained in a high-security hospital and found that participants’ interviews were difficult to code under existing AAI categories for a number of reasons. The adversity and deprivation experienced by some non-normative samples can make it difficult to follow their attachment history. Psychological state at the time of the interview can also make it difficult to make sense of the attachment history. This is particularly true when psychotic factors such as thought disorder and the sedative effects of medication are present. Other contextual factors like participant tendency to disrupt or control the interview process can also make it difficult to stick to the proper interview procedure (Turton et al., 2001).

The strengths of the AAI are its ability to capture aspects of cognition that are highly relevant to problems of interpersonal functioning in PD and its focus on unconscious processes makes it difficult to consciously manipulate (Turton et al., 2001; Crowell & Treboux, 1995). The AAI is based on the key ideas that working models operate partly outside of conscious awareness and that these representations provide guidelines for appraisal and affective experiences in relationships (Main, Kaplan, Cassidy, 1985). The coding system therefore focuses on cognitive aspects of the experiences described such as defensive strategies and incoherence and
inconsistencies in the narrative (Crowell, Fraley, Shaver, 1999). Future research should continue to expand the classification system for the AAI to tap these factors in order to improve validity and reliability with these groups by adding descriptors that capture the specific attachment characteristics of this clinical group (Agrawal et al., 2004; Turton et al., 2001).

9.0 Conclusions
Attachment theory has proven to be a useful construct in developmental models of personality pathology. Attachment studies with Personality Disordered clinical groups have consistently shown strong association between attachment insecurity and PD diagnosis leading several authors to suggest that there is much overlap between the two concepts. However, many participants in psychiatric populations are assigned to the ‘cannot classify’ category of the traditional AAI coding system, which means that this attachment measure has been of limited use in differentiating Personality Disorders from each other and from other clinical populations (Turton et al., 2001), and questions about the reliability and validity of measures designed for use with normative populations on clinical samples have also been raised. Although there is much scope for further research into attachment ‘states of mind’ in clinical populations with Personality Disorder, existing measures need to be adapted to improve their reliability and validity with these groups and to expand their classification system to include scales that specifically capture the characteristics of the target group.
10.0 References


Part 2: Empirical Paper

Evaluating an Alternative Coding Manual for the AAI for use with People with Personality Disorders
Abstract

To date studies that have used the Adult Attachment Interview (AAI) with Personality Disorder (PD) populations have found administration and coding difficulties when applying traditional coding methods to the PD interviews. As a result the reliability and validity of the measure with this population has been called into question. This study aimed to develop a psychodynamically informed coding scheme for the AAI that utilises attachment constructs specific to this group. Twenty four clinical Personality Disordered participants, recruited from specialist outpatient clinics and 30 community controls were interviewed and coded with the new manual. The pilot study showed that reliability on the manual improved when interviews were coded from audio-taped recordings rather than transcripts. The current study aimed to improve reliability further through the use of video-taped interviews.

All scales of the coding manual were adapted by the three co-researchers before the reliability phase. This study focused mainly on the development of the Affect and Cognition scales through integration of non-verbal information into the existing manual. Non-verbal aspects of the scales were developed through observation of a sub-selection of videos in the sample and through a search of the literature on non-verbal behaviour. Reliability was measured on the adjusted scales using 14 videos and an exploratory analysis of all the scales was conducted to assess the validity of the new manual with this population. A more detailed statistical analysis was conducted on the Affect and Cognition scales and the manual was able to discriminate between the clinical and non-clinical groups on the scales of Cognition and the Up-regulation scale of the Affect scales. A content analysis was conducted on the non-verbal behaviour data collected from the whole sample. From this
analysis further suggestions were generated for the improvement of the Cognition and Affect scales. The results showed an improvement of reliability on the manual as a whole from the pilot study.
1.0 Introduction

1.1 Personality Disorders - current classification and controversies

The most recent version of the American Psychiatric Society Diagnostic and Statistics Manual defines Personality Disorder as “An enduring pattern of inner experience and behaviour that deviates markedly from the expectation of 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” (DSM-IV, 1994). Ten Personality Disorders, organised into three clusters, are included in the most up-to-date version of the diagnostic manual and each one of these Personality Disorders is conceptualised as deviations from normal in one or more of the areas of cognition, affectivity, interpersonal functioning and impulsivity.

However, major controversies continue within the field of Personality Disorder research regarding whether categorical or dimensional constructs are best placed to capture Personality Disorder phenomenology and how the descriptive or surface behaviours of the different PDs relate to underlying biological and psychological structures (Kernberg, 1996). Indeed, it has been argued that a major problem of both categorical and dimensional models of PD is their tendency to anchor empirical research to surface behaviour, behaviour which can potentially serve a very different function depending on underlying personality structures (Kernberg, 1996). The high co-morbidity between the different Personality Disorders and also with other clinical syndromes in the DSM-IV has led some to question the validity of the current classification system (Lenzenweger & Clarkin, 1996). It is proposed that Attachment Theory may provide a good theoretical basis from which to understand the
underlying interpersonal processes in PD. The current study aims to develop an alternative coding manual for the Adult Attachment Interview (AAI) for use with people with Personality Disorders. This follows from the observed limitations of the current classification system for the AAI with this population (e.g. Turton, McGauley, Marin-Avellan, Hughes, 2001). In doing this it is hoped that the new measure will improve the reliability and validity of the AAI with this group, and also that it will help to elucidate some of the key cognitive and defensive strategies associated with the behavioural manifestations of the different Personality Disorders.

1.2 Attachment theory

The original proponent of attachment theory, John Bowlby (1973), viewed the attachment system as an innate behavioural system that is responsive to environmental demands having the intended outcome of promoting the infant’s proximity to the attachment figure and, therefore, of protecting the child from danger (Bretherton, 2000). These behaviours gradually come to be focused on the primary caregivers who are the most responsive to the child’s needs and, by the time the child is able to move around and explore its environment, the infant is able to use the attachment figure as a ‘secure-base’ from which to explore and return to for protection or comfort (Ainsworth, 1967). From this theoretical perspective Ainsworth (1978) devised a classification system to measure attachment patterns in young toddlers (12-20 months of age). This is a laboratory based procedure designed to capture the balance of exploratory and attachment behaviours under conditions of gradually increasing stress (Solomon & George, 1999) and the infant is coded into one of four attachment categories; securely attached (B), Anxious: Avoidant (A), Anxious: Ambivalent/resistant (C), and Disorganised/Disorientated (D).
1.2.1 Attachment in adulthood

Central to the research on adult attachment is the notion that, on the basis of repeated experience, the child develops expectations regarding the nature of interactions between themselves and the attachment figure (Fonagy, Steele, Steele, Leigh, Kennedy, Mattoon & Target, 1995). This leads to the formation of an unconscious representation or internal working model (IWM) (Bowlby, 1973) of these relationship patterns, forming a belief system into which early experience is integrated. These internal models regulate the child’s behaviour with the attachment figure and eventually, it is proposed, come to organise behaviour in all significant relationships. (Bretherton & Munholland, 1999).

Therefore, it is predicted that the differences observed in infant-mother attachment would have long-term implications for later intimate relationships, self-understanding and psychological disturbance (Fonagy, 2001). From this theoretical base an interest has grown into the impact of early attachment experiences on development throughout childhood and into adulthood.

The Adult Attachment Interview (AAI) was first developed in the 1980s with an accompanying system for scoring and classification (Main & Goldwyn, 1984a). The development of the AAI followed from the finding that using an interview based method to classify parental mental representations with regards to attachment, it could be demonstrated that there were strong associations between this classification system and infant behaviour towards the parent in Ainsworth’s Strange Situation (for example, Ainsworth, 1985). Since the development of the current AAI classification
system (AAI; Main & Goldwyn, 1998), the relationship between AAI classification and Infant Strange Situation categories has been demonstrated in over 18 samples (Hesse, 1999).

The current version of the Adult Attachment Interview is a semi-structured clinical interview designed to elicit thoughts, feelings and memories about early attachment experiences and to assess the individual's state of mind or IWMs with regards to early attachment relationships. The classification system of the AAI parallels the avoidant/secure/resistant and disorganised categories of the of the infant classification system (Ainsworth, 1985). Therefore, individuals are classified into five categories on the AAI; secure (F), insecure-preoccupied (E), insecure-dismissing (D), unresolved-disorganised (U), and cannot code (CC) (Main & Goldwyn, 1998). The first three of these are what Main refers to as organised attachment strategies. The U category aims to capture the localised break down in coherent narrative around descriptions of loss or trauma and the CC category was later added to capture the interviewee's failure to maintain an organised discourse strategy across the entire interview.

1.3 Personality Disorder and Attachment

Several theorists have considered attachment theory as a conceptual framework for theories of Personality Disorder (e.g. Bartholomew, Kwong & Hart, 2001; Fonagy, Target, and Gergely, 2000). Attachment theory postulates that IWMs of attachment experiences come to act as a filter governing what is perceived, felt and remembered about significant events, which in turn guides a person's behaviour in new
interpersonal situations (Stalker & Davies, 1995). In this way attachment patterns are seen to be the driving force behind the development of complex patterns of social interaction, emotion regulation, and cognitive processing that emerge through the course of development leading to patterns of behaviour and interpersonal functioning that tend to become self-perpetuating into adulthood (Bartholomew et al. 2001).

Attachment is conceptually useful when thinking about key aspects of Personality Disorder such as affect regulation, particularly in close interpersonal relationships. It may play a less central role in explaining other key features of Personality Disorder such as impulse control and disturbances in cognition and perception. Therefore, Attachment Theory is not a complete theory of PD in its own right, rather insecure attachment can be conceptualised within a developmental psychopathology model as a risk factor that may place an individual on one of an array of potential developmental pathways, some of which will lead the individual on a developmental trajectory away from normal healthy development (Bartholomew et al., 2001).

Borderline PD is generally associated with marked instability of affect as well as a ‘preoccupation’ with concerns about current and previous relationship difficulties (Dozier, Stovall, Albus, 1999). Some theorists have conceptualised Borderline PD as a condition of severe attachment insecurity with oscillation between a yearning for close affectional bonds and fear of rejection or abandonment that leads to dread and avoidance of such close relationships (Sable, 1997). As a result, much of the research in the area of attachment and Personality Disorder has focused on Borderline PD, although a growing number of studies have also considered other forms of PD from an attachment perspective. The centrality of difficulties in interpersonal functioning
in the diagnosis of most Personality Disorder makes attachment a relevant construct when considering most PD from a developmental psychopathology perspective.

1.3.1 The AAI and PD

Seven major studies have used the AAI with BPD groups. Of these two have used non-clinical comparison groups (Barone 2003; Fonagy, Leigh, Steele, Steele, Target, Gerber, 1996) and three have used a clinical comparison group (Adam, Sheldon-Keller, West, 1996; Patrick, Hobson, Castle, Howard, Maughan, 1994; Stalker & Davies, 1995). Diamond, Stovall-Clough, Clarkin, Levy,(2003) conducted a small scale preliminary study of 10 BPD which formed a part of a larger scale study of 90 BPD outpatients (Levy et al., 2006).

All AAI studies show low rates of secure attachment in BPD groups when compared with both non-clinical and clinical comparison groups. Findings from earlier studies suggest an over-representation of the preoccupied classification amongst participants with a diagnosis of BPD, with particularly high rates of the sub-category fearfully preoccupied. For example, all 12 BPD participants interviewed with the AAI in Patrick et al.’s (1994) study were classified as preoccupied with 10 out of the 12 BPD patients classified as fearfully preoccupied. When a four category classification system is used, including the classification of U, rates of between 60 % (Diamond at al., 2003) and 89% (Fonagy et al., 1996) were found in BPD groups for lack of resolution with respect to trauma (U). However, more recent studies show higher rates of dismissing classification in BPD groups. Levy et al., (2006) interviewed 90 BPD outpatients for attachment status with the AAI. Of the 90 participants interviewed 30% were classified as dismissing, 15% were classified as preoccupied,
31.7% were classified as unresolved with respect to trauma and, 18.3% were
classified as cannot code, (CC) and only 5% were secure. Studies using the five
category system which includes the cannot code (CC) category show lower rates of
U than earlier studies but between 10-18.3% of the BPD samples in these studies
were classified as CC, indicating a failure to maintain a single coherent discourse
strategy across the whole of the interview (Diamond, 2003, Levy et al., 2006).

1.3.2 AAI studies with other PD

The majority of research into attachment with Personality Disorders other than BPD
have used questionnaire based methods to assess attachment style (e.g. Brennan and
Shaver, 1998, Timmerman and Emmelkamp, 2006). However, two studies have
looked at a range of Personality Disorder features and attachment using the AAI.
Rosenstein and Horowitz (1996) used the four category system of the AAI to
compare attachment classifications of inpatient adolescents assessed for Personality
Disorder. In this study 38% of the sample was classified as dismissing, 42%
preoccupied, 18% unresolved with respect to loss or trauma and only 2% secure. The
authors suggested that PD fit broadly along two dimensions relating to dismissing
and preoccupied attachment. However, numbers in each of the PD groups were
small. Another study using the AAI was conducted on a sample of hospitalised
adolescent matched with a high school sample (Allen, Hauser, Borman-Spurrell,
1996). Only 7.6% of the hospitalised adolescents were classified as securely
attached in comparison to 44.7% of the high school sample. Of particular
significance were the high rates of adolescents classified as unresolved (U) or cannot
classify (CC). At an 11 year follow-up it was found that unresolved (U) classification
and a tendency to derogate attachment relationships was related to self-reported

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criminal behaviour. Tendency to derogate attachment relationships and an absence of idealisation and preoccupying anger within attachment relationships was also associated with hard drug use. This study, therefore, goes some way to linking antisocial traits with insecure and unresolved attachment styles and with derogation of attachment relationships. However, the beginning of adolescence marks a period of tremendous effort to become less dependent on caregiving from primary attachment figures (Allen & Land, 1999), which needs to be taken into consideration when using attachment measures, such as the AAI, that assess attachment relationships focusing on parents with this age group. Studies have shown that there are higher levels of unresolved and dismissing classification amongst adolescents than adult mothers in non-clinical low socio-economic samples but not in high socio-economic groups (Hesse, 1999). The authors have tried to control for this confounding factor by selecting only upper-middle class hospitalised adolescents and controls (Allen et al., 1996).

1.3.3 Summary of PD and AAI studies
Although there is a growing body of research which has used the AAI with Borderline PD, research with interview based methods of attachment beyond this PD group is more limited. To date all research that has used the AAI with PD groups has shown an inverse relationship between PD and attachment security, with some evidence to suggest that PD diagnoses fit broadly along two dimensions relating to preoccupied and dismissing attachment types. However, more recent evidence has shown that both dismissing and preoccupied attachment types can be associated with BPD and there is growing evidence that a large proportion of PD participants are
either unresolved (U) with respect to loss or trauma or fall within the CC classification on the AAI (e.g. Levy, 2005).

1.3.4 Strengths and difficulties of using the AAI with PD groups

The strength of the AAI is its ability to capture aspects of cognition that are highly relevant to problems of interpersonal functioning in PD. The coding system focuses on cognitive aspects of the experiences described such as defensive strategies and incoherence and inconsistencies in the narrative rather than the narrative provided as such (Crowell, Fraley and Shaver, 1999). The emphasis of the interview on unconscious processes and internal representations that operate at least partly outside of conscious awareness make it difficult to manipulate consciously (Turton et al., 2001; Crowell, 1995).

However, the AAI was originally developed for use with normative samples and use with non-normative samples has raised important questions about its reliability and validity with these groups. Studies of clinical samples have encountered some major procedural and coding difficulties (e.g. Patrick et al, 1994; Fonagy et al, 1996; Turton et al., 2001). Non-normative samples can pose challenges to the AAI classification system as some of the more extreme attachment experiences and complex attachment histories seen in Personality Disordered samples violate the kinds of norms and expectations underlying the interview. Turton et, al. (2001) reviewed interview transcripts drawn from Personality Disordered offenders detained in a high-security hospital and found that the adversity and deprivation experienced by this sample made it difficult to follow their attachment history. For some participants their psychological state at the time of the interview also made it difficult
to make sense of the narrative, and contextual factors such as participant tendency to disrupt or control the interview process made it difficult to stick to the proper interview procedure (Turton et al., 2001).

It has been suggested the reliability and validity of the AAI with Personality Disordered groups would be improved by developing a classification system that taps the defensive styles and cognitive features characteristic of the attachment representations of this group rather than attempting to classify high-risk samples under descriptors developed for normative samples (Agrawal et al., 2004, Turton et al., 2001).

1.4 Psychoanalytic theories of PD

An application of psychoanalytic theory to the area of attachment and PD may be beneficial for two reasons. First, it has been argued that an exploration of PD from a psychoanalytic perspective may help to resolve some of the major controversies associated with categorical and dimensional classifications of the disorders by elucidating the underlying personality structures associated with the different disorders and the surface behaviours observed (Kernberg, 1996). Second, psychodynamic theories of PD have traditionally played a crucial role in the development of an understanding of the cause and progression of these disorders (Milton, 1996) and can, therefore, provide specific descriptors that are conceptually relevant to the attachment experiences of this group. Such theories are, therefore, likely to improve the construct validity of the AAI with this group.
Typically psychodynamic theories of PD have focused on three key theoretical dimensions: reality testing, defense style and object relations (Bornstein, 2005). Reality testing can be defined as “the ability of the ego to distinguish between the stimuli or perceptions which arise from the outer world, on the one hand, and those which arise from the wishes and impulses of the id on the other” (Brenner, 1974, p.58). Psychoanalytic theories of defensive style postulate that PD symptoms reflect the characteristic defenses used by the individual with PD (Bornstien, 2005). For example the emotional lability and impulsivity of BPD reflect their over-reliance on splitting as a defensive strategy (Linehan, 1993). Object relations theory proposes that internalised relationship ‘templates’ govern perception, expectations, emotional reactions and behaviour in interpersonal situations. From these ‘templates’ predictable relationships between the individual’s self-representations and their representations of others are formed, which in turn perpetuate behaviour (Bornstien, 2005). Although every PD can be described in terms of these three constructs it is the interplay between these constructs that determines the behavioural manifestations of each disorder (Bornstein, 2005).

1.5 The current study

The alternative coding manual tested in this study was developed by four clinicians with psychoanalytic training and extensive clinical experience of Personality Disordered patients: Dr Anthony Bateman, Dr Marco Chiesa, Prof Peter Fonagy and Dr Mary Target, and is based around the psychodynamic constructs described above. The seven core dimensions of the coding manual are thought to represent characteristic features or defensive strategies of Personality Disorder patients, which
are conceptually relevant to attachment. These are: affect, aggression, cognition, relatedness, self, self-object representation and sexualisation.

A pilot-study with 32 participants was carried out in different stages by two PhD students, using two versions of the manual. The second phase involved testing a revised version of the manual comparing two different coding techniques - coding from transcripts versus additionally listening to the voice recordings. The results from this phase showed that inter-rater reliability improved for six scales with the modified coding technique. Following the second pilot phase it was suggested that the reliability of the measure might further increase with the use of visual information. A growing number of studies over the past 20 years have explored the non-verbal concomitants of emotional experiences (Harrigan, Rosenthal & Scherer, 2005). Research that focuses exclusively on self-reported feeling states in the study of affective phenomena are subject to various problems such as reliance on fallible memory, response and self-presentation bias (Rosenthal & Rosnow, 1969). The use of non-verbal cues allows for the evaluation of the total pattern of verbal and non-verbal behaviour much of which may be strategically controlled and manipulated. Researchers focusing exclusively on non-verbal reports lack this information and have to take the participant’s verbal report at face value (Harrigan, Rosenthal & Scherer, 2005).

Therefore, the current study is a manual development study which aimed to test the reliability and validity of the revised alternative coding manual for the AAI using video-recorded interviews with participants. However, the scales do not currently contain information for classifying the visual nonverbal data that video tapes will
enable us to code. Therefore, a further aim was to establish emerging patterns in nonverbal behaviour that can be categorised and incorporated into our existing coding scales. Reliability was then tested using these new, extended coding scales.

An exploratory analysis has been carried out to assess the construct validity of all the scales by testing if the manual can distinguish between the clinical and the non-clinical groups. A more in depth statistical analysis was then conducted to assess the validity of the Affect and Cognition dimensions of the coding system. It was beyond the scope of this study to look at all the dimensions in detail. The Cognition scale was chosen for a more in depth analysis due to the strong association between mental disorganisation in recollection of attachment experiences and psychopathology demonstrated in the literature (e.g. Levy, 2005). This scale has been designed to assess disturbance of thinking in relation to attachment experience and measures constructs such as confused or bizarre statements, overly detailed descriptions, perseverance on a particular theme and dissociation. The Affect scale was examined in greater depth as it is the scale that was thought likely to have the greatest nonverbal component. Difficulty in affect regulation has been considered a core component of Borderline PD in the literature (e.g. Linehan, 1993) and can be defined as a deficiency in the ability to modulate affect so that emotions tend to spiral out of control, change rapidly and get expressed in intense and unmodified form, often overwhelming reasoning (Clonkin, Bradley & Westen, 2006). The scale is comprised of three separate scales that are each given a separate score. Down Regulation assesses the tendency of the interviewee to reduce emotional arousal in relation to stressful experiences, Up Regulation assesses the tendency of the interviewee to heighten emotional arousal in relation to stressful experiences and
Lability assesses the readiness with which different emotions oscillate throughout the course of the interview (for full description of scales see appendix).

Besides testing the inter-rater reliability of the scales through statistical analysis other important methodological considerations when developing a coding manual include the phenomenon of observer drift in which raters who obtain reliability gradually become more idiosyncratic in their coding over time (Barker, Pistrang & Elliot, 2003), and reactivity of observation in which the process of observation changes the behaviour observed (Barker et al., 2003). In order to address these points, following the reliability phase of the study, all three raters coded every tenth video to check for rater drift. The conditions of each interview were kept as consistent as possible with each participant in order to minimise the influence of experimental conditions on group differences.

1.5.1 Process of development of the non-verbal scales

The existing literature was searched to find the major categories of non-verbal behaviour used to code affect in previous research. The areas of facial action (e.g. Ekman & Friesen, 1978) and body posture in the form of proxemics (the use and perception of inter-personal space), kinesics (actions and positions of the body, head, and limbs) and eye-gaze (Harigan, Rosenthal & Scherer, 2005) as well as vocal expression of affect (Juslin & Scerer, 2005) were identified.

The literature on facial action coding proposes that there are six emotional expressions that are universally recognised. These are: happiness, anger, disgust, fear, sadness and surprise, with more limited empirical support for contempt as a
universal emotion (Ekman, 1999). Cross-cultural studies have demonstrated a good level of support for these categories being spontaneous and accurately recognised by participants in over 21 separate cultures (Ekman, 1999). Because these emotions have been shown to be universally recognised without training these categories have provided the basis for much research into affect (e.g. Giese-Davis, Piemme, Dillon & Twirbutt, 2005) and will provide the basis of the descriptions of non-verbal affect to be developed into the current coding manual. Research has also shown that when a person attempts to neutralise or mask an emotion ‘micro expressions’ of their true emotional state might be seen (Ekman & Friesen, 2003). Normal facial expressions of affect may only last for a few seconds. However, micro-expressions, which are much harder to detect usually last just a fraction of a second (Ekman & Friesen, 2003).

Parts of the scales where visual data could be informative were then identified and three separate researchers individually reviewed 2-3 of the videoed interviews that they had conducted, and recorded episodes of non-verbal behaviour that could be fed-back into the scales.

Focusing on the scales of Affect and Cognition, the literature was then reviewed for published studies that had used these dimensions to code affective expressions in therapy situations. For example, one study had adapted the Specific Affect Coding System (SPAFF) developed by Gottman, Woodin and Coan (1998) for use with women discussing experiences of breast cancer in therapy sessions (Giese-Davis, Piemme, Dillon, Twirbutt, 2005). The research by Giese et al. (2005) combines descriptions of non-verbal behaviours such as facial expressions, eye gaze and
kinesics as well as vocal expressions and verbal behaviours. Relevant descriptions of
dissociative behaviour were also described in the literature (Hesse & Main, 2006)
and were incorporated into the Cognition scale of the coding manual. Descriptions of
shame (Keltner, 1995) and confusion, concentration and worry (Rozin & Cohen,
2003) were also used to elaborate the non-verbal descriptions of affect in the Affect
scales. A page was added to the front of the manual on coding affect from video
data. This included descriptions of affect across the domains of facial expression,
kinesics and voice tone. Specific descriptions were also added under particular scales
(see figure 1.5 for instructions added to the manual on coding affect from video data,
and appendix II for further details in the scales). Four out of the five major areas of
research identified from the non-verbal literature were used in the development of
the scale. The area of proxemics was not used as the videos did not involve
participants interacting with anyone else on camera.

During the initial training phase on the manual three researchers coded three trial
interviews. Further alterations to the non-verbal descriptors in the manual were made
after this phase. Throughout the subsequent phases of the study the researchers
recorded all episodes of non-verbal behaviour seen that related to the scales as well
as other episodes that were of interest but could not be captured by the current scales.
This data forms the basis of the qualitative part of the study which aims to develop
further and elaborate the non-verbal descriptions in the scales through the findings
from this manual development study.
CODING AFFECT USING VIDEO DATA

CATEGORIES OF AFFECT
Visual and voice aspects of care affect groups are described below with examples of low and high level expressions of each.

NEUTRAL AFFECT
Neutral affect, or lack of strong affective response may be shown through a lack of facial tension and a lack of indicators of other affective states alongside neutral voice tone with regular pitch and rhythm and smooth steady body movements with no strong gestures.

POSITIVE AFFECT: INTEREST/WARMTH-EXCITED INTEREST
Low level- interest/ warmth:
Physical cues- increased volume and tempo of speech alongside warmth in tone of voice (affection demonstrated when talking about memories). Facial signs of attentiveness may be present such as focused gaze and good eye-contact. There may be some smiles although less broad with lower intensity than high-level expressions.

High level- warmth/excitement
Physical cues- high level of positive energy will be demonstrated through rapid fluctuations in pitch, volume and rate of speech giving an overall impression of buoyancy. Speech may be accompanied by excited hand gestures and gesticulations that may fluctuate rapidly. Facial indicators will include indicators of excited happiness such as smiling, crow feet wrinkles around the eyes, raised cheeks and a wrinkle from the nose to the outer edges of the lips.

ANXIOUS-FEARFUL
Low-level- tension
The person may have difficulty expressing what they want to say. They may be hesitant with unfinished sentences and thoughts- For example saying ‘uh’, ‘ah’ repeatedly. Facial indicators of anxiety include a raised and straightened brow conveying worry or apprehension, lip biting and touching of the face. Body indicators include fidgeting or frequent shifting of body position, pressing against self- eg. Rubbing/wrangling hands together, wiggling legs, or a sense of restlessness or mild agitation.

High level- fearful
Body and vocal signs of tension such as fidgeting will remain but may be accompanied by fearful facial expressions. These include frequent eye movements, raised and straightened brow conveying worry or apprehension alongside other facial indicators of fear. Open and tense eyes with the upper eyelid raised and the lower lid tense. The lips maybe either open and tense or drawn back and tense. In extreme cases the individual may convey the message ‘I’d rather not be here right now’ through turning the body outwards or looking away from the interviewer perhaps alongside automanipulation.

SADNESS-EMOTIONAL DISTRESS
Low-level-
Facial expressions indicating sadness include the brows drawn together in the centre, downturned eyes and drooping around the corners of the mouth. The voice tone may be lowered and slower in pace with some pauses.

High level-
Facial indicators of emotional distress are the same as sad facial expressions although with greater intensity of expression and facial tension. The lips may quiver and there will be
crying or tears. The voice may be wavering or sound as though the individual is crying or too choked up to speak.

**FRUSTRATION-ANGER**

**Low level-**
Facial indicators of frustration or irritation include tightening of the mouth and pressing the lips together, and frowning or and angry brow without other indicators of anger. There may be a slight bobble of the head whilst speaking and the voice may be stuttering with changes in rhythm and the way certain words are stressed.

**High level- anger**
Facial cues for anger include the brows lowered and drawn together with vertical lines appearing between the brows. Lower and upper eyelids are tense and the upper lid maybe lowered by the action of the brows. The eyes maybe staring or bulging slightly and the lips maybe tense and pressed firmly together or open in a tense squared position. The nostrils may be flared. Lip presses, involuntary twitches or jerks, tightened jaw, clenched teeth may also be seen, Voice tone will be raised or lowered out of the normal range with changes in the way words are stressed.

**EMBARRASSMENT/SHAME**

**Low Level- embarrassment**
Facial indicators of embarrassment include downward gaze, or shifting gaze, particularly with glances to the left. There might be embarrassed smiles, which can be distinguished from amused or enjoyment smiles by their weaker intensity and the participant's attempts to control the smile.

**High Level- Shame**
Facial indicators for higher level shame remain the same as for embarrassment but downward gazes will be for longer and eye contact will be avoided. The person may have a hunched posture or appear tense. Voice tone may be lowered and harder to hear. The person may blush or become tearful.

**MICRO-EXPRESSIONS IN THE FACE**
Normal facial expressions of affect may only last for a few seconds. However, microexpressions, lasting a fraction of a second may also occur. Although difficult to detect, these expressions may give an indication of the emotions that the person is masking or attempting to neutralise.

1.5.2 Research aims/ hypotheses:

- To collect and then analyse video data to establish patterns of nonverbal behaviour that can then be classified and incorporated into the existing coding manual.

- To establish if the inter-rater reliability of the modified coding scales can be improved from the audio-taped version through the use of nonverbal aspects of the videoed interview data.
• To test the criterion validity of the scales by determining whether the measure can discriminate between the PD clinical group and the non-clinical groups as measured with the SCID-II.

• To test criterion validity by establishing if there are statistically significant differences between the clinical and non-clinical control group on the dimensions relating to Cognition. It is predicted that the clinical group will score significantly higher on this scale that the non-clinical group.

• To test the criterion validity of the Affect scales by establishing if there are statistically significant differences between the clinical and non-clinical group on the dimensions relating to Affect. It is predicted that the clinical group will score statistically significantly higher than the non-clinical group on all three dimensions that comprise this scale.

• To test the construct validity of the Affect scales. This will be done in two parts. First, correlations will be used to assess the extent to which the three subscales of the Affect scale correlated with each other. It is predicted that they will not be highly correlated as the subscales have been designed to measure different theoretical constructs (discriminate validity). Second, it is predicted from the research into BPD that shows that affective dysregulation is a core component of this PD that the Affect scales associated with heightened affect (Up-regulation and Lability) will correlate significantly with number of items endorsed on the BPD scale of the SCID-II questionnaire (convergent validity).
2.0 Method

2.1 Participants

2.1.1 Power Calculation

In order to calculate the number of tapes that need to be coded by each rater to have adequate power for inter-rater reliability to be calculated, tables on sample size and optimal designs for reliability studies were consulted (Walter, Eliasziw & Donner, 1998). Where there are three independent raters a sample size of 14.4 is needed to detect reliability at the $p = .80$ level. Therefore, after the initial training period it is proposed that seven clinical and seven non-clinical participants will be used to establish reliability in the reliability phase.

In order to calculate the sample size necessary to reach power at the conventionally accepted level of .8 for independent t-test analysis an online power calculator was used. At $\alpha = .05$, and with a sample size for the groups of $N1 = 30$ and $N2 = 30$ the difference between the group means would need to be $\geq .57$. Theoretically it was predicted that the mean difference would be at this level or higher as it was anticipated that the control and clinical group scores will cluster around opposite ends of the nine point coding scales.

2.1.2 Recruitment

Fifty four participants took part in the study, thirty of whom formed a non-clinical control sample recruited from the community and twenty four of whom were participants with a diagnosis of Personality Disorder, recruited through specialist Personality Disorder and long-term psychotherapy treatment centres in the Greater London area.
Community participants were recruited through placing adverts around a university campus and at various health and community centres and shop windows around central London and the area in which the majority of the PD sample were recruited. Participants contacted the researchers and initial information about the study was sent to them. If they were interested after reading this information an interview date was arranged. The clinical sample was recruited through approaching clinical staff in specialist services and long-term psychotherapy departments in West London and Loughton, Essex. After suitable participants were identified information about the study was sent to them and they were invited to participate. Participants who expressed an interest were then followed up through phone contact and an interview arranged. Three of the clinical participants were recruited through the community sample due to them reaching criteria for PD on the SCID-II interview.

2.1.3 Demographics of the sample

<table>
<thead>
<tr>
<th>Personality Disorder</th>
<th>Number scoring for one cluster only</th>
<th>Number scoring in two clusters</th>
<th>Number scoring across all three clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidant-</td>
<td>10</td>
<td>Cluster A: 2</td>
<td>A&amp;B: 7</td>
</tr>
<tr>
<td>Dependent-</td>
<td>2</td>
<td>Cluster B: 3</td>
<td>A&amp;C: 3</td>
</tr>
<tr>
<td>Obsessive compulsive-</td>
<td>2</td>
<td>Cluster C: 0</td>
<td>B&amp;C: 1</td>
</tr>
<tr>
<td>Paranoid-</td>
<td>15</td>
<td><strong>Total: 5</strong></td>
<td></td>
</tr>
<tr>
<td>Schizotypal-</td>
<td>3</td>
<td><strong>Total: 11</strong></td>
<td></td>
</tr>
<tr>
<td>Schizoid-</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Histrionic-</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcissistic-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borderline-</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: 8
Table 2.1 above shows the classification of Personality Disorders given to participants in the clinical group as well as the co-morbidity between DSM-IV clusters. The table shows that only three out of the 24 clinical participants met criteria for one PD alone. No one in the non-clinical control group scored above the threshold for diagnosis of a PD using the SCID-II.

<table>
<thead>
<tr>
<th>Group</th>
<th>Gender</th>
<th>average age (range)</th>
<th>Ethnicity</th>
<th>occupation</th>
<th>education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Male- 7, Female - 17</td>
<td>39 (19-58)</td>
<td>White British- 10</td>
<td>Employed- 6</td>
<td>1) No qualifications- 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>White other - 7</td>
<td>Unemployed- 17</td>
<td>2) GCSEs- 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Black African- 3</td>
<td>Student- 1</td>
<td>3) Post-16- 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Afro Caribbean- 3</td>
<td></td>
<td>4) A'level- 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chinese- 1</td>
<td></td>
<td>5) Degree 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mixed race- 1</td>
<td></td>
<td>6) Higher degree 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other- 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Clinical</td>
<td>Male- 6, Female - 24</td>
<td>28 (18-63)</td>
<td>White British- 11</td>
<td>Employed- 7</td>
<td>1) No qualifications- 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>White other - 9</td>
<td>Unemployed- 5</td>
<td>2) GCSEs- 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Black African- 2</td>
<td>Student- 18</td>
<td>3) Post-16- 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Afro Caribbean- 2</td>
<td></td>
<td>4) A'level- 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chinese- 5</td>
<td></td>
<td>5) Degree- 17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mixed race- 1</td>
<td></td>
<td>6) Higher degree 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other- 0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2 Ethics

The ethics approval for this study came from St. Mary's Research Ethics Committee ethics number: 05/Q0403/134. Taking part in this research involved interviews, which covered topics that some people might find difficult to discuss. Participants were informed that if they found the interview upsetting they were free to decide not to answer the relevant question or to stop the interview at anytime at any time.
Following the interview advice was given by the researchers as to how to access further support if the participant felt that they needed it. All interviewees were given a number to help to anonymise the participant and all data was stored in line with the data protection act and will be destroyed following the write up of the study (see appendix for ethic approval documents and information sheets given to participants).

2.3 Procedure and measures

The three named researchers were involved in the recruitment and interviewing of participants. Participants who agreed to attend an interview were given more detailed information about the study and asked to sign a consent form. All participants were then given the personality questionnaire of the Structured Clinical Interview for the DSM-II Axis-II Personality Disorders (SCID-II) (First, Spitzer, Gibbon & Williams, 2002). Participants who reached criteria for PD on the questionnaire were then administered the SCID-II accompanying structured interview for the Personality Disorder(s) for which they reached criteria on the questionnaire. The interview was videoed and later scored against the DSM-IV criteria. The SCID-II questionnaire and interview was chosen as the measure of PD as it is the most commonly used measure in other studies, in particular in other studies on attachment and PD.

Participants were then administered the Adult Attachment Interview (AAI; Main and Goldwyn, 1998). The Adult Attachment Interview consists of 17 questions asked in a set order with standardized probes. Individuals are asked to describe their relationship with each attachment figure during childhood, to choose five adjectives to describe these relationships and to support these descriptors with specific memories. They are further asked about their caregiver’s response to them when they
were in physical and emotional distress and about memories of separation, loss, rejection, and times when they might have felt threatened, including physical and sexual abuse. They are also encouraged to reflect on the influence of these relationships on current functioning and on their parent's motivation. The last part of the interview attempts to gather information about the subject's attachment relationships to his or her own children or to an imagined child.

A pilot-study with 32 participants had already been carried out in different stages by two PhD students, using two versions of the manual and comparing two different coding techniques. Following the first pilot phase the organisation and content of the coding manual was revised. The revised manual was then tested comparing two different coding techniques - coding from transcripts versus additionally listening to the voice recordings. The results showed that inter-rater reliability improved for six scales with the modified coding technique. Following the second pilot phase it was suggested that the reliability of the measure might further increase with the use of visual information. Therefore, the current study aims to test the reliability and validity of the revised alternative coding manual for the AAI using video-recorded interviews with participants. The whole procedure took between 1½ hours and 2½ hours per participant.

Clinical participants were interviewed in rooms in the clinic in which they were recruited and non-clinical participants were interviewed in rooms around UCL. The researchers were kept blind to the participant group through disguising the interview setting through interviewing participants against a white wall and through keeping other features of the interview setting as consistent as possible. All three researchers
interviewed both clinical and non-clinical participants who were then assigned a number at random. Researchers did not code any of the interviews that they had conducted except in the reliability phase of the study where this could not be avoided.

2.4 Coding

There were three raters involved in this study. Two raters were clinical psychology trainees whose first language was English. The third rater was a psychodynamically trained PhD student whose first language was German. The coding manual was developed in several stages during this study. Firstly, during the training phase all three researchers analysed and coded two clinical and two non-clinical interviews and adaptations to the coding manual were made on the basis of this process. During coding the researchers identified sections of interest in the interview and recorded the scale and coding description that was applicable to the section. A level of mild/moderate/severe was then given to the instance. The number and level of instances under each scale were counted and an overall score for the scale was given at the end of coding (see appendix IV for examples of coding and scoring sheets).

Examples of non-verbal behaviour were recorded throughout the coding phase in this study. This data formed the basis of a content analysis of the Affect and Cognition scales, and it is hoped that qualitative analysis of these examples will suggest further developments to improve these scales for future use of the coding manual.
2.5 Brief overview of the scales in the manual (see appendix II for complete coding manual)

Affect scales

Down Regulation: This scale aims to assess the extent to which the participant tends towards reducing emotional arousal, in particular in relation to stressful experiences.

Up Regulation: This scale aims to assess the extent to which the participant tends towards heightening emotional arousal, in particular in relation to stressful experiences.

Lability: This scale aims to assess the readiness with which different emotions oscillate in the course of the interview.

Aggression Scales

External Aggression: This scale aims to assess the extent to which an individual’s internal working model of relationships is infused with externally directed aggression.

Passive Aggression: This scale aims to assess the extent to which an individual’s internal working model of relationships is infused with passive aggression.
Cognition Scale
This scale aims to assess indications of disturbances of thinking, such as confused or bizarre statements, overly detailed descriptions, perseverance on one particular theme as well as sudden changes of state and discontinuities of a subjective state.

Relatedness Scales
Hostile Grievance: The aim of this scale is to assess the extent to which the participant holds hostile grievances towards the attachment figure, which does not seem justified.

Non-Attachment: This scale aims to assess the lack of emotional investment in attachment figures.

Over-extended Attachment: This scale aims to assess an over-investment or generalization of attachment in ordinary relationships.

Anxious Dependency: The aim of this scale is to assess participants who describe a continuing childish dependent relationship with one or more caregivers.

Oscillation: The aim of this scale is to assess the extent to which an individual oscillates between a desire for or actual closeness to the attachment figure, and a need to withdraw to a safer distance.
Lack of Concern Towards the Other: This scale aims to assess the participant's lack of awareness of others as separate and independent beings, with feelings, needs and rights.

Self Scales

Lack of Self Structure: Extent to which the self is deliberately excluded from the narrative.

Self Overvaluation: This scale aims to assess unrealistic over-valuation of the self.

Self Undervaluation: This scale aims to assess unrealistic under-valuation of the self.

Self-Object Representation

A) Exaggerated/ over-simplified: The attachment figure is represented in a way which appears to the reader as an exaggerated and oversimplified aspect of a more complex relationship.

B) Incongruous and incoherent: The description of the attachment figure is contradictory and the relationship appears rapidly to shift in the interview (prototypically from one extreme to another), without the participant explicitly recognising it.

Inappropriate Affect Tone: The aim of this scale is to provide an overall rating of the inappropriateness of feelings toward important attachment figures.
Sexualisation Scale

Extent to which the attachment system has been infused by sexual feelings.

2.6: Phases of the study

Phase A: Reliability Phase

Aim: to calculate the reliability of the adapted coding scales. Seven clinical and seven non-clinical videos were independently coded by all three researchers and an intraclass correlation co-efficient was calculated for each scale. Following this phase two scales were dropped from the manual and the three researchers went on to divide the sample and code the remaining videos separately.

Phase B and C: Empirical analysis

An empirical analysis was conducted on the data from all 54 participants in the study.

Phase D: Content analysis

Alongside the other information recorded in the coding sheets the researchers made note of the associated non-verbal behaviour. The non-verbal data were then analysed using Content Analysis (Smith, 2000). The data from all 54 participants were used in this analysis. Instances of non-verbal behaviour were recorded in the Content Analysis table (see appendix VI) alongside a description of the context in which it had occurred and the scale that the episode had been classified under. Type of behaviour seen was divided into paralinguistic/voice/face expression/behaviour
(Harrigan, Rosenthal & Scherer, 2005). New subcategories which emerged from the data were then created and examples were given to illustrate these different themes. Initially these themes were divided by the scale under which it was originally coded. However, as non-verbal behaviour emerged that did not clearly fit within the coding scales new subcategories were created.
3.0 Results section

3.1 Data Preparation

No key variables had missing data and there were no outliers on the scales of Cognition and Affect which are the focus of this study. Before conducting statistical analysis of the data the normality assumptions of each scale were checked. This was done by firstly checking the normal distribution graphs (see appendix V) and then calculating the z-scores of the Skewedness and Kurtosis of each scale. Where these values were above 2.5 the scale was considered to be sufficiently skewed to violate the normality assumption of the t-test. This was the case for eight of the 17 scales. On scales where this was the case square root transformations were conducted. Some of these transformed scales remained somewhat skewed after transformation but it was decided that the t-test is robust enough to cope with some skew and parametric tests are preferable over non-parametric statistics. The Levene’s tests were used to check the equality of variance assumption. Where this assumption has been violated the statistic quoted is the t-test for equality of variance not assumed.

3.2 Demographics

Due to the discrepancies between the demographics of the clinical and non-clinical groups tests of significance were carried out on the demographic variables. Table 3.2.1 below shows that significant differences were found between the clinical and non-clinical groups on the variables of age, education level and employment status.
Table 3.2.1

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Control mean (n=30)</th>
<th>Clinical mean (n=24)</th>
<th>Significance test</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>6 male, 24 female</td>
<td>7 male, 17 female</td>
<td>$\chi^2 (1) = 0.613$</td>
<td>0.434</td>
</tr>
<tr>
<td>Age</td>
<td>27.8</td>
<td>41.3</td>
<td>t (42.05)= -3.88</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Education</td>
<td>5.00</td>
<td>3.25</td>
<td>$\chi^2 (1) = 14.42$</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Employment</td>
<td>‘yes’ = 8</td>
<td>‘yes’ = 5</td>
<td>$\chi^2 (2) = 24.45$</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>‘no’ = 4</td>
<td>‘no’ = 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>’student’ = 18</td>
<td>‘student’ = 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Correlations between the Affect and Cognition scales and the variable of age were conducted to look for a relationship between the two which might obscure the relationship between group and these scales (table 3.2.2). ANOVAs were carried out to test for a relationship between the variables of education and employment with the Affect and Cognition scales (table 3.2.3). A bonferroni correction was used to reduce the chance of type I error. The corrected p-value is 0.05 / 12 = 0.004.

Table 3.2.2 Correlations: age and the Affect and Cognition scales (n=54)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Scale</th>
<th>R</th>
<th>p-value</th>
<th>Significant at corrected level?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Cognition</td>
<td>0.451</td>
<td>0.001</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Up-regulation</td>
<td>0.131</td>
<td>NS</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Down-regulation</td>
<td>0.182</td>
<td>NS</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Lability</td>
<td>-.113</td>
<td>NS</td>
<td>No</td>
</tr>
<tr>
<td>Demographic</td>
<td>Scale</td>
<td>F-value (df)</td>
<td>p-value</td>
<td>Significant at corrected level?</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------</td>
<td>--------------</td>
<td>---------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Education</td>
<td>Cognition</td>
<td>3.04 (5,48)</td>
<td>0.018</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Up-regulation</td>
<td>1.55 (5,48)</td>
<td>NS</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Down-regulation</td>
<td>0.83 (5,48)</td>
<td>NS</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Lability</td>
<td>0.40 (5,48)</td>
<td>NS</td>
<td>No</td>
</tr>
<tr>
<td>Employment</td>
<td>Cognition</td>
<td>10.16 (2,51)</td>
<td>&lt; 0.001</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Up-regulation</td>
<td>4.40 (2,51)</td>
<td>0.017</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Down-regulation</td>
<td>0.07 (2,51)</td>
<td>NS</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Lability</td>
<td>2.57 (2,51)</td>
<td>NS</td>
<td>No</td>
</tr>
</tbody>
</table>

Tables 3.1.2 and 3.1.3 show that there is a significant relationship between score on the Cognition scale and the demographic variables of age and employment status.

Age will need to be corrected for when investigating group differences on this scale. However, it is not possible to correct for employment due to the small numbers at some levels of the variable, although the discrepancy in employment status needs to be taken into consideration when interpreting the results.

### 3.3 Part A: Reliability

Table 3.3.1 Intra-class correlations (ICC) coefficients (95% confidence interval) reflecting agreement between coder 1, coder 2, and coder3 for the overall score on the scales using video data and the revised manual (n=14). Reliability coefficients for coder1 and coder2 in the pilot phase of the study also given. Coded with tape recorded data only (n=16).
A two-way mixed model was used and the single rater reliability coefficient is quoted for the pilot phase in which tape-recorded interviews were coded, and in this study where video interviews were coded independently by three raters. The single rater coefficient represents the reliability of a single score rather than average between raters (average rater) and is used when raters are to go on to code the rest of sample individually, as they did in this study.
<table>
<thead>
<tr>
<th>Scale</th>
<th>Reliability Coefficient in <em>current study</em> (single rater)</th>
<th>Reliability Level for <em>current study</em> Cicchetti (1994)</th>
<th>Reliability Coefficient in <em>pilot study</em>, (single rater)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Down regulation</td>
<td>0.57</td>
<td>Fair</td>
<td>0.28</td>
</tr>
<tr>
<td>Up regulation</td>
<td>0.86</td>
<td>Excellent</td>
<td>0.58</td>
</tr>
<tr>
<td>Lability</td>
<td>0.68</td>
<td>Good</td>
<td>0.23</td>
</tr>
<tr>
<td>External aggression</td>
<td>0.87</td>
<td>Excellent</td>
<td>0.77</td>
</tr>
<tr>
<td>Passive aggression</td>
<td>0.38</td>
<td>Poor</td>
<td>0.015</td>
</tr>
<tr>
<td>Cognition</td>
<td>0.85</td>
<td>Excellent</td>
<td>0.64</td>
</tr>
<tr>
<td>Anxious dependency</td>
<td>0.43</td>
<td>Poor</td>
<td>0.75</td>
</tr>
<tr>
<td>Hostile grievance</td>
<td>0.90</td>
<td>Excellent</td>
<td>0.56</td>
</tr>
<tr>
<td>Non-attachment</td>
<td>0.74</td>
<td>Good</td>
<td>0.70</td>
</tr>
<tr>
<td>Over-extended attachment</td>
<td>.*</td>
<td>-</td>
<td>0.06</td>
</tr>
<tr>
<td>Oscillation</td>
<td>.*</td>
<td>-</td>
<td>.*</td>
</tr>
<tr>
<td>Lack of Concern</td>
<td>0.87</td>
<td>Excellent</td>
<td>0.19</td>
</tr>
<tr>
<td>Over-evaluation</td>
<td>0.93</td>
<td>Excellent</td>
<td>0.86</td>
</tr>
<tr>
<td>Under-evaluation</td>
<td>0.63</td>
<td>Good</td>
<td>0.22</td>
</tr>
<tr>
<td>Lack of self structure</td>
<td>0.19</td>
<td>Poor</td>
<td>0.45</td>
</tr>
<tr>
<td>Self-object: A</td>
<td>0.54</td>
<td>Fair</td>
<td>0.21</td>
</tr>
<tr>
<td>Self-object: B</td>
<td>0.72</td>
<td>Good</td>
<td>0.31</td>
</tr>
<tr>
<td>Affect tone</td>
<td>0.17</td>
<td>Poor</td>
<td>0.31</td>
</tr>
<tr>
<td>Sexualisation</td>
<td>0.92</td>
<td>Excellent</td>
<td>0.77</td>
</tr>
</tbody>
</table>

*lack of range in data (majority of scores =1, not present) therefore reliability could not be calculated.*
It can be seen that in the current study 11 out of the 18 scales had an ICC coefficient of >0.60, the conventionally accepted cut-off for acceptable reliability (Cicchetti, 1994). The scales of Over-extended attachment and Oscillation did not have sufficient variability for a reliability calculation (mostly scores of 1=absent were given for these scales). All but three scales improved their reliability from the Pilot phase. The Lack of Self Structure scale and the Affect Tone scale did not improve their reliability from the pilot study and were, therefore, dropped for the purposes of coding the rest of the data due to very poor agreement between coders.

Reliability scores for combinations of two raters were compared for each of the scales for which ICC <0.6. Following this only two of the scales showed acceptable reliability, with an ICC > 0.6. Down regulation showed an ICC coefficient of 0.82 between coder 1 and coder 2, and Self-object showed an ICC coefficient of 0.84 between coder 2 and coder 3. All three coders were consistent with each other on all the other scales.
3.4 Part B: A priori statistical analysis of the Affect and Cognition Scales

3.4.1 A priori t-tests: Assessing Criterion Validity

Independent samples t-tests were conducted on the three Affect scales and the Cognition scale to test the hypothesis that the manual is able to discriminate between the clinical and non-clinical groups, and that the clinical group will score significantly higher on the scales than the non-clinical group. The results are presented in table 3.4.1 below and the mean scores for the groups on each scale are presented in figure 3.4.2.

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test</th>
<th>Independent samples t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p-value</td>
</tr>
<tr>
<td>Down regulation</td>
<td>4.603</td>
<td>.037</td>
</tr>
<tr>
<td></td>
<td>1.925</td>
<td>40.41</td>
</tr>
<tr>
<td></td>
<td>.061</td>
<td></td>
</tr>
<tr>
<td>Up regulation</td>
<td>5.453</td>
<td>.023</td>
</tr>
<tr>
<td></td>
<td>2.666</td>
<td>37.18</td>
</tr>
<tr>
<td></td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>Lability-transformed data used</td>
<td>4.97</td>
<td>.030</td>
</tr>
<tr>
<td></td>
<td>1.377</td>
<td>43.12</td>
</tr>
<tr>
<td></td>
<td>.176</td>
<td></td>
</tr>
<tr>
<td>Cognition</td>
<td>.884</td>
<td>.352</td>
</tr>
<tr>
<td></td>
<td>7.475</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>
3.4.2 Down regulation

The difference between the clinical and non-clinical group is close to significant \( t = 1.925 \) (40.40), \( p = 0.061 \) with the clinical group scoring higher on Down regulation than the controls. The Down Regulation scale was normally distributed and the full range was used.

3.4.3 Up-regulation

The difference between clinical and non-clinical groups reaches significance \( t = 2.666 \) (37.18), \( p = 0.011 \) with the clinical group scoring higher on up-regulation than the controls. This scale was not normally distributed, with a greater number of participants scoring towards the lower end of the scale. However, this skew was not sufficient to violate the normality assumption and no transformation was necessary.
3.4.4 Lability

The difference between the clinical and control group was not significant. The
distribution graph shows that the majority of participants scored one on this scale and
the scale had a restricted range (see appendix IV for distribution graphs).

3.4.5 Construct validity of the Affect scales

Testing Discriminate Validity

A correlation was conducted on all three of the Affect subscales to test the
hypothesis that the scales were measuring separate constructs and therefore would
not be highly correlated. Bivariate correlations were conducted and the Pearson’s
correlation co-efficient for each correlation is shown in Table 3.4.5.

<table>
<thead>
<tr>
<th></th>
<th>Up regulation</th>
<th>lability</th>
</tr>
</thead>
<tbody>
<tr>
<td>down regulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td>-.021</td>
<td>-.208</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.878</td>
<td>.131</td>
</tr>
<tr>
<td>N</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>up regulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.567(**l)</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.001 level (2-tailed).

The Lability and Up-Regulation scales are shown to be highly correlated $r = .567$, $p > .001$. There were no other significant correlations between the Affect subscales.
3.4.6 Testing the Convergent validity of the Affect scales

A correlation between the measure of Borderline PD used and the subscales of Up-regulation and Lability was conducted to test the hypothesis derived from the literature that there would be an association between BPD and heightened or fluctuating emotional arousal during the interview. The results are shown in Table 3.4.6.

<table>
<thead>
<tr>
<th>Table 3.4.6: correlation co-efficients for Up-regulation and Lability with BPD SCID-II score (n=54)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPD score on the SCID-II questionnaire</td>
</tr>
<tr>
<td>up regulation</td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Lability</td>
</tr>
<tr>
<td>(transformed data used)</td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

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

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

The table shows that there is a significant correlation between the Lability scale and total number of items endorsed on the SCID-II questionnaire scale for Borderline PD \( r = .332, p = 0.015 \). The correlation between BPD score and Up-regulation is marginally significant.
3.4.7 Cognition

The difference between the clinical and non-clinical groups was highly significant on this scale $t=7.475$ (52), $p<0.001$, with the clinical group scoring significantly higher on this scale than the control group. The distribution of this scale was normal and the full range of the scale was used. The difference in the group means is shown in Figure 3.4.7.

Figure 3.4.7 mean group scores for the Cognition scale

3.4.8 Testing the significance of demographic differences between group on Cognition score

The demographic variables of age and employment status were shown to be significantly different between groups. Table 3.4.8 shows that when age is controlled for the significant Main Effect of group remains. The covariate of age is not significant. Therefore the difference between the clinical and the non-clinical groups on the Cognition scales is not due to group differences in age. It was not possible to statistically control for employment status due to the low numbers at some levels of the variable.
Table 3.4.8: ANCOVA: Cognition score by group with Age as a Covariate (n=54)

<table>
<thead>
<tr>
<th>Factor</th>
<th>F value (df)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>28.93 (2.51)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Group</td>
<td>35.71 (1)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Age (covariate)</td>
<td>1.48 (1)</td>
<td>0.230</td>
</tr>
</tbody>
</table>

3.4.9 Summary

The clinical group was found to score statistically significantly higher than the non-clinical groups on the subscale of Up-Regulation and the Cognition scale and marginal significance was found on the subscale of Down-Regulation. There was no significant difference between the clinical and non-clinical groups on the Lability subscale. The Lability and Up-Regulation subscales of the Affect scale were found to be highly significantly correlated. This suggests a high degree of overlap in the constructs being measured and may be a concern for the construct validity of the scales. The full range of the Lability scale was not used in this study, with the majority of participants scoring in the low range on this scale.

3.5 Part C: Exploratory analysis of the other scales

It was hypothesised that the manual as a whole would be able to discriminate between the clinical and the non-clinical groups on all the scales. Therefore, an exploratory analysis was conducted on the remaining scales in the manual in order to test the criterion validity of the measure as a whole. Independent samples t-tests were used to assess the significance of differences between the group means on each scale. The results of this exploratory analysis are shown in table 3.5.1 and group means for each scale are presented in Figures 3.5.2- 3.5.6.
Table: 3.5.1: group differences for each scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>Group Mean (SD)</th>
<th>Significance test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control (n= 30)</td>
<td>Clinical (n= 24) Range t-value (df) p-value</td>
</tr>
<tr>
<td>Down regulation</td>
<td>3.93 (1.64)</td>
<td>5.00 (2.28) 1-8 Tested a priori</td>
</tr>
<tr>
<td>Up regulation</td>
<td>2.00 (1.44)</td>
<td>3.42 (2.26) 1-9 Tested a priori</td>
</tr>
<tr>
<td>Lability</td>
<td>1.43 (1.22)</td>
<td>1.96 (1.49) 1-6 Tested a priori</td>
</tr>
<tr>
<td>External aggression</td>
<td>2.47 (1.80)</td>
<td>4.21 (2.11) 1-7 3.522 (52) 0.001**</td>
</tr>
<tr>
<td>Passive aggression</td>
<td>1.80 (1.38)</td>
<td>3.08 (2.04) 1-7 2.594 (40.95) 0.013*</td>
</tr>
<tr>
<td>Cognition</td>
<td>2.50 (1.57)</td>
<td>6.08 (2.00) 1-9 Tested a priori</td>
</tr>
<tr>
<td>Anxious dependency</td>
<td>2.27 (1.53)</td>
<td>1.92 (1.25) 1-6 -1.140 (52) 0.259</td>
</tr>
<tr>
<td>Hostile grievance</td>
<td>3.03 (1.77)</td>
<td>6.21 (1.82) 1-9 6.617 &lt;0.001**</td>
</tr>
<tr>
<td>Non-attachment</td>
<td>2.40 (1.63)</td>
<td>4.46 (2.40) 1-8 3.595 (38.98) 0.001**</td>
</tr>
<tr>
<td>Over-attachment</td>
<td>1.13 (0.58)</td>
<td>1.54 (1.32) 1-6 1.444 (31.52) 0.159</td>
</tr>
<tr>
<td>Oscillation</td>
<td>1.30 (0.70)</td>
<td>1.67 (1.05) 1-4 1.333 (40.90) 0.190</td>
</tr>
<tr>
<td>Lack of Concern</td>
<td>1.60 (1.13)</td>
<td>3.21 (2.27) 1-9 3.306 (36.71) 0.002**</td>
</tr>
<tr>
<td>Over-evaluation</td>
<td>2.13 (1.81)</td>
<td>3.71 (2.46) 1-8 1.289 (41.73) 0.205</td>
</tr>
<tr>
<td>Under-evaluation</td>
<td>2.70 (1.71)</td>
<td>4.25 (2.36) 1-9 4.603 (52) 0.000**</td>
</tr>
<tr>
<td>Self-object A</td>
<td>2.47 (1.31)</td>
<td>5.17 (2.62) 1-9 4.618 (32.08) 0.000**</td>
</tr>
<tr>
<td>Self-object B</td>
<td>1.57 (1.22)</td>
<td>3.50 (2.19) 1-8 3.976 (36.61) 0.000**</td>
</tr>
<tr>
<td>Sexualisation</td>
<td>1.67 (1.18)</td>
<td>3.25 (2.36) 1-7 2.876 (35.31) 0.007**</td>
</tr>
</tbody>
</table>

* marginal significance, ** significant at corrected significance level.

- Scales in italics are scales where reliability was poor.
Bonferonni corrections - 0.05 / 13 (Number of t-tests) = 0.004

*Figure 3.5.2 Group mean scores for the Aggression scales*

*Figure 3.5.3 Group mean scores for the Relatedness scales*
Figure 3.5.4 Group mean scores for the Sexualisation scale

Figure 3.5.5 Group mean scores for the Self scale
3.5.9 Summary

With the exception of Anxious Dependency all the scales showed a trend of the clinical group having a higher mean score than the non-clinical control group.

Six out of 13 scales showed a statistically significant difference between the clinical and non-clinical control groups using a bonferroni correction. One further scale was marginally significant. The majority of the scales used the full range of scores; however, four of the scales had a restricted range with the upper range ≤ 6. These scales were: Lability, Anxious Dependency, Over-Extended Attachment, and Oscillation.
3.6 Part D: Content analysis

The findings of a qualitative analysis of the non-verbal content of the interviews are described below. Table 3.6.0 shows the frequency of instances of striking non-verbal behaviour recorded under each scale. A more in depth account of the themes emerging from the data are given for the Affect and Cognition scales.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of times non-verbal info recorded</th>
<th>Clinical</th>
<th>Non-clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Down regulation</td>
<td>124</td>
<td>77</td>
<td>47</td>
</tr>
<tr>
<td>Up regulation</td>
<td>35</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Lability</td>
<td>15</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>External aggression</td>
<td>55</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>Passive aggression</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Cognition</td>
<td>36</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>Anxious dependency</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Hostile Grievance</td>
<td>27</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Non-attachment</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Over-extended attachment</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oscillation</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lack of concern</td>
<td>15</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Over-valuation</td>
<td>12</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Under-valuation</td>
<td>27</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Self-object: inconsistent</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Self-object: exaggerated</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Sexualisation</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other (animation/engagement)</td>
<td>32</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>No scale recorded</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>
3.6.1 The Affect Scales

Various behaviours relating to affect regulation emerged from the qualitative analysis of the data. These behaviours have been grouped according to relevant scale and sub-categories or themes of behaviour that emerged within that scale.

Down regulation-

1. **Denial of negative affect**: number of events recorded under this category:
   
   68, 23 (non-clinical), 45 (clinical).

   **Examples**: laughing, smiling, jolly, upbeat/animated, making a joke- whilst describing something negative or traumatic.

Low level example:

Participant talks about incident where she told her mum she was leaving home and then went and sat out on the steps until she fell asleep- 'my mum was winding me up leaving me out there' (laughs whilst describing this event).

Participant talks about how his parents didn’t really fit together and eventually got divorced- "if they weren’t together I wouldn’t have been born and the world would have been a very sad place"- (smiling and makes a joke).
Moderate level example:

Participant talks about how she had not seen her father for two years and then she met him unexpectedly in public “I randomly saw him again which was quite funny” (laughing whilst describing this incident).

High Level example:

Participant describes a fight between his parents where his dad held a gun to his mother’s head when he was 8 years old- “my dad said to my mum I could shoot you you know. But he didn’t even have a gun. He had a gun but it was a replica. He had it pointing into her and I’d say dad it don’t work” (laughing whilst recounting the incident).

Participant talks about how her uncle had his legs taken off by a bus when he was run over (smiling and animated whilst describing the incident).

Participant talks about being assaulted whilst walking home through a suburb of Cape town and having a gun pulled on her 'and there is no one to help, there's nothing, and they rape. 95% of the time they rape....you are lucky if you get away alive ok?' (starts laughing- goes on to explain that she thought she was 'finished' whilst smiling).
2. **Absence of affect:** whilst describing something difficult or traumatic-

   Number of instances recorded under this category: 56, 25 (Non-clinical), 31 (clinical)

**Examples:** monotone/matter-of-fact voice, neutral facial expressions, shrugging or dismissive gestures with hands.

**Low Level examples:**

*Participant is talking about having a difficult current relationship with his father-*

"it's got to the point now, and this is the way our relationship has gone, where I actually ignore some of his phone calls" (**matter of fact voice tone, absence of indications of emotion in voice and face**).

**Moderate Level examples:**

*Participant talks about a period of bullying that lasted for a few years. Later indicates that it had a lasting effect on him-*

"It wasn't nasty and it didn't happen very often but it was very unpleasant" (**matter of fact, lack of indications of emotion**).

**High Level examples:**

*Participant recalling what her mother had told her-*

"she also told me in my life that she tried to get rid of me in the bath with a bottle of whisky- which she didn't do because I'm still here, because she couldn't afford two of us, that was one reason" (**said in flat monotone voice, no facial of vocal indications of emotion**).
Participant talks about the death of her mother 4 years ago after a long illness—
“how was the funeral for you?”: “um, I can’t think really” - (shakes head and
shrugs dismissively, lack of indications of emotion in face and voice tone).

Lability-

1. **Sudden dampening of affect**: number of events recorded under this
category: 4, 2 (non-clinical), 2 (clinical).

Examples: affect change from happy and animated to sad, voice trailing off,
suddenly looks down, sad facial expressions, distracted.

**Low level:**

Participant talks about how much she loved the pet monkey she was given by her
grandmother as a child and goes on to explain that it was later taken away from her
because it became aggressive (animated and lively whilst talking about the
monkey to suddenly sad in facial expression and voice tone, becomes more still).

Participant talks about how her cousins would laugh at her when she was told off.
(voice trails off, looks down, sad facial expression).
Moderate Level:

Participant talks about her parents being threatening with her when she was a young child (Mood dampens suddenly, looks down and starts fidgeting with hands, voice tone become quieter and hard to hear, sad facial expression- episode lasts for a few minutes).

High Level examples: none seen

2. **Sudden change in intensity of affect:** number of events recorded under this category: 11, 7 (non-clinical), 4 (clinical).

Examples: starts crying or becomes tearful and emotional half way through a description of something traumatic, or starts crying and becomes emotional whilst describing pleasant childhood memories, becoming suddenly angry or agitated whilst recounting an event. Rated for severity according to how traumatic the event described was and whether the direction of affect is understandable.

Low Level:

Participant talks about taking overdoses in early adolescence and feeling disappointed when she woke up alive (becomes tearful).
Moderate Level examples:

sudden increase in emotional intensity when describing positive memories about mum- "I just remember her being like 'oh my beautiful girl' and wrapping me in a towel". (tearful, voice tone emotional-cracking/breaking slightly).

starts crying when prompted to give examples about how relationship with father was loving – "I could just remember him getting me ready for school, and making my lunch and stuff" (crying softly, voice emotional- cracking/breaking slightly).

Participant is talking about his wife and suddenly says "I'm sorry I'm just thinking about things I've done to her" (suddenly starts crying, head in hands).

High Level examples:

subject suddenly bursts into tears when trying to find 5 adjectives; so far she has mentioned: painful, scary, uncertain, abused... (sits still, then suddenly bends forward, covers face with right hand and starts crying/ sobbing).

Up-regulation-

1. Increase in negative affect- Number of instances recorded under this category: 35, 12 (non-clinical), 23 (clinical)

Examples: voice choked, crying or sad expressions, tearful, anxious/wringing hands, experiencing pain in chest, sighing, agitated or angry whilst recounting memories.
Categorised by level according to how stressful the event described was and whether the direction of the emotional reaction is understandable.

**Low Level Examples:**

Participant talks about how the other kids at school used to tell her that her parents didn't love her because she was left for her Gran to raise *(voice becomes choked with emotion).*

Participant asked why he chose the adjective hate to describe his relationship with his father. He recalls walking up to his dad at a party and undoing the zip on his trousers—"and he really, really got upset about that. I don't know why really" *(Look emotional, looks down at his lap).*

Participant recalling relationship with father who was sometimes violent towards her—"I didn't know what I was supposed to be doing or how, you know? I just didn't know. So I was always worried I was going to upset him, but I didn't know what was going to trigger it you know...so it was quite hard. Yes that's it really" *(voice choked, holding back tears).*

**Moderate Level Examples:**

Participant talks about how she often feels that people will never call her again when they are slow to get back to her—goes on to say that she thinks she can never change this part of herself *(begins to cry and crying intensifies as she talks).*
Participant recalls an incident where she was left at a campsite on her own for a couple of hours waiting for her friend and her boyfriend to arrive. She recalls ‘crying for hours and pacing around feeling depressed’ and ‘feeling betrayed’—(becomes tense in the interview whilst recall the incident- facial expression distressed/tense, wringing hands).

Participant does a sharp out breath after saying that his mother died when he was 20, then puts his hand to his chest and says “I have a pain in my chest, I don’t like it”.

High Level Examples:

Participant recalls beating up a boy at school who damaged a record that he had lent him (he had previously been badly bullied at school)—“I wasn’t bullied anymore after that, but I had to turn into this monster to do that- I don’t like to think of it, but I have to confront it I suppose” (participant is sobbing loudly and he leans forward and places his head in his hands, interviewer decides to turn off camera due to his distress).

Other non-verbal categories relevant to the Affect scale not captured by existing scales-

Increase in animation/involvement in the narrative- number of instances recorded
(all instances were noted in the interview but not recorded under a scale): 32 20
(clinical), 12 (non-clinical).
Examples: acting out parts of the narrative e.g. acting out being beaten, using
gestures or voice tone to place emphasis on statements e.g. clicking fingers to
illustrate mother disappearing or angrily recounting and re-enacting arguments.
Recalling incidents as though telling a story or providing entertainment- exaggerated
expressions and voice tone, excited gestures, or at a higher level becoming excited
whilst describing something traumatic- direction of affect is intense and incongruent.

Low Level:

Participant describing trying to get back in contact with Grandmother after coming
back from living abroad when she was 16- “when I got back to England I tried
writing to an aunt of mine that lived just outside of Winchester and I got a letter back
from her saying- your Gran is with us, but don’t bother contacting us, she’s very ill,
she’s too ill for you to visit” (strong angry emphasis on aunt’s words, ‘acting’ her
aunt’s words).

Participant asked if she had any other traumatic experiences in childhood?- “no
apart from the times that I thought my mother was home to stay and then she
disappeared like a puff of smoke as though she had never been there” (clicks fingers
to emphasise mother suddenly disappearing).

Moderate Level

Participant recalls a hug and a kiss from her stepfather that she recalls felt partly
sexually abusive at the time (Participant hugs herself in the interview and screws
up her face as though disgusted).
Participant talks about how her mum would shake the spoon drawer as a way of threatening that she was about to get hit with a spoon- and how her and her brother found this funny (participant smiling broadly, excited and animated with hands).

High Level

Participant talks about seeing her mum being hit by her boyfriend with a metal bar

“I’ve seen my mum beaten with a metal bar out of a wardrobe- battered until she didn’t wake up. She would stay with that man because she loved him so much”

(emphasises the word “battered”- mimes hitting someone with a bar, angry face).

Participant talks about her mum giving birth in a car whilst driving on the motorway. “a policeman pulled her over and said ‘will you step out of the car’ and she said ‘I’d love to but I’ve just given birth’ and me and Tommy were like- where did you get that mummy- it was amazing” (becomes excited and animated with hands, broad smile, putting on different voices for the policeman and her mother).

3.6.2 Cognition Scale

1. Regression: Number of instances recorded under this subscale: 19, 2 (non-clinical) 17 (clinical)

Examples: Childish voice tone, childish language, pouting, or child-like facial expressions, head turned down with eyes up, touching self/self-soothing, fretful/anxious/submissive, slips from past tense to present tense.
Low Level

Participant recalls her mother’s reactions to one of her boyfriends as a young teenager- “I thought mummy was always jealous of my boyfriends” (Childish language “mummy” and childlike voice tone).

Whilst recounting what father’s office looked like as a child participant slips from past to present tense briefly (talking fast, excited).

Moderate Level

“When I was about 3 years old my dad brought a house in Manor Park, and all I remember of it was running around and it was just so big, and there were so many rooms. I didn’t think we were going to live there, I just thought we were there. I was running around and turns out it wasn’t a big house it was quite a small house. Just a two bedroom house, so that wasn’t much space for the 7 of us” (childish voice and posture, hesitant, anxious, submissive, looking down and playing with hands-self-soothing behaviour whilst recalling a memory from a child’s perspective).

Participant describes how she used to feel frightened and worried about men when she was around 5 years old- “they are too tactile and I never had a man figure in my life” (changes tenses without noticing so it sounds as though she is describing a current situation- this is also at the point in the narrative when she begins to talk like a child and use childish language).
High Level

Participant talks about witnessing a lot of domestic violence in her community whilst growing up—"all the mummies and daddies had fights and all of the mummies were domestically beaten up" (childish language and child-like voice, pouting in a child-like way whilst talking).

2. Dissociation: Number of instances recorded under this subscale: 9, 1 (non-clinical), 8 (clinical).

Examples: changing in and out of voice tones—e.g. formal 'reporter' voice when talking about watching mother being raped, sitting upright and becoming 'proper'. Change of tense, change of topic-jump in the story.

Low Level

Participant asked if there were any other experiences that she would describe as traumatic in her childhood—"Yes loads, but for some reason I can't remember any of them" (looks absent- momentary change of facial expression-expression flattens/loss of previous expression).

Moderate Level

Participant talks about how men would come around to her house when she was a young child and that she witnessed several men beat her mother. She goes on to talk about how she realises now that her mum was being raped but that she did not know
what sex was at the time- "on several accounts, she was raped by several men that
came into the house" (voice becomes formal "reporter" voice, and posture
stiffens when she says the quoted sentence).

Later in the narrative the same participant goes on to talk about how her mother’s
ex-boyfriend is now serving a life sentence for rape and murder (voice change to
formal when she says the words ‘life sentence’, sits upright and becomes
‘proper’).

High Level

Participant describes an incident where he assaulted a boy at school after the boy
damaged a record that he lent to him- "one day I thought, I’ve had enough. I’ve told
teachers, I’ve told parents, I’ve even got into some crime thinking that the
groups….for a while I tried talking with a west Indian accent, (voice tone becomes
louder and deeper-looks up as though recounting) "and one day I don’t know what
happened I thought I’ve had enough of this, and I’d lent this guy a record and he
hadn’t brought it back, and he’d had it for weeks… and every time I asked him they all
stop up there laughing at me….and one day he gave it back to me and I wished he
hadn’t because it was so scratched it looked like he had put it on the tarmac…"(voice
tone becomes ‘dreamy’ and reminiscent) "and I don’t know I just snapped"
(matter of fact)….. "I went home, I felt like I just needed something to eat, I came
back. I walked up behind him, and I just didn’t stop beating him (breaks down and
starts sobbing) "and then it was almost daily, especially the ones that done it in the
past, it’s like I had a mental note of all of them and I just went after all of them
really. I waited until they said something. I didn’t just hit them, I always let them
think that I'm not going to and then I'd start...even using bits of wood. I'm not saying that I'm proud of it but I did get left alone then" (detached 'spooky' voice when saying 'and it was almost daily then' then voice tone changes back to normal tone again quickly).

3. Confused/bizarre- Number of instances recorded under this subscale: 4 (all clinical).

Examples: hesitancy whilst answering question- puzzled expression, participant appears to respond to internal stimulus, bizarre affect whilst narrative confused and bizarre :4

Participant talks about feeling a presence when in the garage on her own aged 4- "I remember being on my own in the garage when I was about 4 and feeling a presence..." (looks down, and smiles- appears to be talking to herself) ...."excuse me, sorry, I'll have to tell myself though".

Participant talks about how she feels that she is two beings and that she wants to make them one- "I saw it, it was something that I saw in my life. I had two bags, one would be that type of bag and another type of bag and two pairs of pants. I would always buy two pairs of things and I looked at them and swapped them around. I just didn't want two, I don't know why I wanted one" (laughing whilst explaining this, picks up her bag to illustrate what she is saying).
4.0 Discussion

The aims of the current study were twofold. First, to assess whether the psychodynamically informed alternative coding manual for the AAI can overcome the limitations of the original coding system with a PD clinical group. A revised version of the manual with video taped interviews was used to see whether the inclusion of video taped interviews would help to improve the reliability of the new scales. Second, to assess whether psychodynamic theory could elucidate the interpersonal processes of the PD group that are relevant to attachment experience, and whether these could distinguish them from the non-clinical participants on the AAI. The discussion will therefore focus on the reliability of the scales and their ability to distinguish between the clinical and non-clinical groups before focusing in greater detail on the scales of Affect and Cognition and examining the non-verbal findings described qualitatively in this study that are relevant to these two scales.

Reliability

As predicted the reliability of the scales was greatly improved through the use of videoed interviews and the introduction of a non-verbal component into the coding scales, with 15 out of the 18 scales gaining higher rater agreement using the modified coding scales with videoed data than during the pilot study. Only four scales had low reliability with the modified coding scales and 11 scales had a reliability coefficient of >0.60, compared to six in the pilot study. Of these, two were dropped from the rest of the study (Affect Tone and Lack of Self-structure). This result emphasises the importance of contextual information about the participant’s emotional state and the non-verbal subtext to parts of the narrative when trying to extract meaningful data from an interview with this clinical group.
Two scales did not have great enough variability in the results to calculate reliability. These scales were subscales of the Relatedness scale: Oscillation and Over-extended attachment. The Oscillation subscale assesses the tendency of the subject to oscillate between a desire for closeness and need to withdraw to a safer distance which can lead to difficulties in modulating the perception of intimacy, so that a new relationship is felt to be immediately very close and special, and later as intolerable and dangerous. The Over-extended attachment subscale concerns the tendency of the participant to develop feelings of attachment towards otherwise non-significant others. For example figures that the participant has only met occasionally.

Oscillation was rare in the sample, with both clinical and non-clinical groups having a mean score of between one (absent) and two (very minimal) on this scale. There was a floor effect with this scale leading to a restricted range. This pattern of attachment insecurity has been discussed in the literature on Borderline PD. For example Sable (1997) conceptualised BPD as a condition of severe attachment insecurity with oscillation between a yearning for close affectional bonds and fear of rejection or abandonment that leads to dread and avoidance of such close relationships. However, the AAI focuses primarily on early attachment experiences between the ages of 5-12 years old. It is possible that some of the relationship patterns described in the literature on adults with PD do not take the same form in earlier relationships or that the AAI, which was designed to assess the individual's perceptions of their childhood experiences, does not make explicit enough long-term trends in relationships.
Over-extended attachment was also rare with both clinical and non-clinical groups having a mean score of between one (absent) and two (very minimal) on this scale. There was also a floor effect on this scale leading to a restricted range in the data. Again, it is possible that the AAI does not ask the questions necessary to tap this relational pattern as it specifically focuses its questions on key attachment figures with minimal opportunity to describe relationships beyond these. It is, therefore, proposed that these scales are excluded from future versions of the coding manual or that the interview is modified to include questions which may be better able to tap these constructs.

All the Affect subscales and the Cognition scale improved greatly with the use of videoed data and the modified coding scales.

**Criterion validity of the scales**

This coding manual was developed from a psychodynamic theoretical base with the aim that it would be able to discriminate the types of pathological cognitive and defensive styles seen in PD from a non-PD control group as defined by DSM-IV criteria. It is beyond the scope of this study to examine all the scales in depth. However, the mean scores of each scale demonstrate that there is a trend for the clinical group to score higher than the non-clinical group on each scale. Nine out of the 17 scales kept in the study showed this trend to reach statistical significance. Two further scales were marginally significant (Down Regulation and Sexualisation). Anxious Dependency was the only scale for which this trend was reversed. It was also a scale with a low reliability and restricted range, with most participants scoring towards the lower end of the scale. It may be that this scale is too sensitive to normal
anxieties in early childhood rather than something more pathological and the scale may need to be modified or dropped from future versions of the coding manual.

It must be noted that two of the scales in the exploratory analysis had poor inter-rater reliability: Passive Aggression and Anxious Dependency. The poor reliability of the scales increases the likelihood of making a type II error as the variance accounted for by coder differences is likely to obscure the variance account for by group differences. However, despite poor inter-rater reliability there was a significant difference between the clinical and non-clinical groups on the Passive Aggression scale.

4.2 The Affect Scales

Reliability, discriminate validity and scale construction

The three subscales that comprise the Affect scale were chosen for more in-depth analysis as it was predicted that they would be the scales with the greatest non-verbal component and would benefit most from further elaboration of the non-verbal parts of the coding manual. The inclusion of non-verbal information was shown to have a great effect on the reliability of the Affect scales with Down regulation’s ICC coefficient improving from low to fair, Up-regulation improving from fair to excellent reliability and the Lability scale improving the most from low to good reliability.

Reliability for the Down-Regulation scale was lower than the others although still fair. Much of this scale is conveyed non-verbally as it emphasises the congruence of affective state with the narrative. Inclusion of video data allowed raters to go beyond
the limited affective information available using audio tapes to better assess the tone
of what was said as well as explicit denial of affect, and for the first time to see
participants who actively reduced affective response through smiling or laughing
about negative experiences. Because this was the first time such non-verbal
information was included in the manual it may be that the first revision is not
sensitive enough to all of the non-verbal information associated with this scale. The
normality assumptions were met by the data and the scale was marginally able to
discriminate between the clinical and non-clinical groups. It is predicted that the
difference between the clinical and non-clinical groups will become significant if the
reliability of the scale were to improve and it is hoped that inclusion of some of the
examples from the qualitative analysis will help to bring the non-verbal descriptions
to life and improve agreement in future manuals.

The Up-regulation and Lability subscales had good and marginal reliability
respectively. The Up-regulation scale used the full range of the scale and the data did
not violate the normality assumption. However, the Lability scale had a restricted
range. The scale was not able to discriminate between the clinical and non-clinical
groups, which is problematic for the criterion validity of the scale, although this may
be a feature of the floor effect on this scale. The improvement of the ICC coefficient
for this scale from the pilot study suggests that non-verbal information is crucial to
capture accurately the construct of Lability.
4.2.2 Construct Validity

**Discriminate Validity**

Correlations were performed on the three subscales of the Affect scale to check that the scales were discriminating different affective phenomena. The Lability scale was shown to correlate very highly with the Up-regulation scale suggesting that there is some overlap in these constructs. A look at the qualitative data supports this overlap in constructs.

**Convergent validity**

The literature proposes that affect regulation is a core deficit in Borderline PD (e.g. Linehan, 1993), leading to affect becoming intense, overwhelming and fluctuating rapidly (Clonkin et. al., 2006). It was therefore predicted that the Up-regulation and Lability scales should converge with the construct of BPD as measured by the SCID-II questionnaire. There was found to be a significant correlation between Lability and number of items endorsed under Borderline PD on the SCID-II questionnaire. The correlation between Up-regulation and BPD was close to significant at the p=0.05 level. It must be noted that the SCID-II questionnaire was very sensitive to traits that did not meet criteria when followed up with the interview, which may obscure the relationship. Unfortunately we were unable to use the questionnaire data for this analysis as we did not interview non-clinical participants on scales for which they were below the threshold on the questionnaire. However, it is also possible that the convergent validity of this scale would improve if better reliability could be achieved.
Qualitative findings

The aim of conducting a content analysis on this data was to identify the types of non-verbal phenomena that were emerging under these scales in order to develop further the coding scales and also to look for phenomena that are not currently captured by the manual.

Content analysis showed that episodes coded as Down Regulation could be divided into two groups 1) denial of negative affect and 2) absence of affect. The first group appears to be akin to the psychodynamic defense of denial. This involves a split in which there is a cognitive acknowledgement of a painful experience but the person attempts to control the affective response (Bateman & Holmes, 2003). This was seen through participant’s actively down-playing negative affect through laughing, smiling or behaving in a jolly, upbeat/animated way or making jokes whilst describing something negative or traumatic. In contrast the second category captured participants who appeared to have successfully down regulated their affect to the point where there was no conscious awareness of painful affect associated with the traumatic event described, which is perhaps more akin to a process of repression (Bateman & Holmes, 2003).

However, although it may be predicted that the second category is more pathological than the first it was more common in the non-clinical group than denial of affect.

One problem associated with the Down-regulation scale is the difficulty in distinguishing lack of affect as a result of a defensive process from lack of affect as a result of working through a difficult experience. The coding manual currently allows a response to be coded as worked through if there is an acknowledgement of the
affect experienced at the time of an event and a description of the process of change in the intensity of affect from childhood to adulthood. However, in practice participants rarely reflected openly about how their responses had changed over time and it may be that this second category is partially capturing participants for whom there has been some resolution of traumatic events without explicitly stating that this process has occurred.

Instances coded under the Lability scale could be subcategorised into two types 1) sudden dampening of affect and 2) sudden change in intensity of negative affect already present. All instances coded under the Up-regulation subscale involved an increase in negative affect whilst recounting episodes.

Content analysis of the Lability and Up-regulation subscales showed that sudden fluctuations in affect were rare, often occurring only once within a particular interview. It may be that the criteria for scoring in the high range on this scale are too high and that because the interview is relatively short it does not have the opportunity to elicit the more dramatic affective shifts described in the higher range of the scale. It is also possible that the presentations observed with PD clients in the context of therapy are not seen in the AAI interview as there is no established relationship between the interviewer and the participant. More common was an increase in the intensity of negative affectivity rather than fluctuations between affective states. The majority of episodes coded as Lability involved a sudden increase in the intensity of negative affect with a sudden dampening of affect being less common. This helps to explain the overlap with the Up-regulation subscale and episodes were often double coded on both these scales as the ‘sudden changes in
intensity of negative affect’ that emerged from the Content analysis looks very similar to Up-regulation. Content analysis revealed that all instances coded as Up-regulation involved an increase in negative affect whilst recounting memories, although conceptually the scale is also designed to capture sudden increases in positive affect. The observation that the majority of changes in affect intensity were in the direction of an increase in negative or aggressive affectivity is in line with findings in the literature that Borderline PD participants, the criteria for which were reached by 17 out of 24 of our clinical sample, report more negative emotions and fewer positive emotions with a greater intensity of negative affect than positive affect (Ebner, Linehan & Bohus, 2004).

**Suggestions for new scale development from the content analysis**

A category of animation/engagement with the narrative was created which appears to be conceptually relevant to Up-regulation. Examples of this category included acting out parts of the narrative or using gestures or voice tone to place emphasis on statements, recalling incidents as though telling a story or providing entertainment and becoming excited whilst describing something traumatic. This category appears to overlap partially with the preoccupied category of the original AAI coding manual which includes participants who directly address the parent in speech, or quote the parent’s speech (Main & Goldwyn, 1998). The preoccupied category has been shown to be a prominent classification for Borderline PD (e.g. Patrick et al., 1994). However, the category that emerges from the qualitative analysis is not fully captured under the traditional coding manual and also seems to have an affective component with participants becoming emotionally involved in the narrative that they are recounting. Affect became intense and incongruent in the higher level
examples and appears conceptually similar to the unmodified and overwhelming emotional states described in the literature on affect dysregulation (e.g. Clonkin et al., 2006).

Proposals for revision of the Affect scales

It is proposed that the rater agreement would improve on the Down regulation scale through the inclusion of examples of the two subtypes identified in the qualitative analysis into scales. It can be difficult to capture non-verbal components descriptively and examples may help to bring the descriptions in the coding scheme to life.

Due to the high correlation between the Lability and Up-regulation scales and the difficulties associated with the Lability scale it is suggested that the two scales are combined into a single scale, perhaps called the Dysregulation scale to reflect its conceptual similarity with the literature on affect regulation. It is important to keep the construct of Lability due to the association shown between this scale and the SCID-II questionnaire measure of BPD, however the scale does not appear to be robust enough to stand-alone. It is also proposed that a new component of the Dysregulation scale includes the category of animation/engagement with the narrative which, appears to occur when participants become emotionally absorbed in the narrative and is partly captured by the 'preoccupied' category of the traditional manual.
4.3 The Cognition Scale

Reliability, discriminate validity and scale construct

Reliability on the Cognition scale was good and as predicted the scale was able to discriminate between the clinical and the non-clinical groups with the clinical group scoring significantly higher than the controls on this scale. The normality assumptions of the scale were met and the full range of the scale was used. The reliability ICC coefficient improved from minor to good using video data which suggests the importance of non-verbal information in rating the Cognition scale. In particular sub dimensions such as dissociation are not possible to code from transcripts and difficult to code from audiotapes. Interestingly only two out of 19 examples of non-verbal behaviour recorded were from non-clinical participants suggesting that this scale is tapping something very specific to the clinical group. This is in line with the finding in the literature that high rates of mental disorganisation when recounting attachment experiences are found in PD groups using the AAI, both in terms of the U category and the CC category in the traditional coding system (Levy, 2005). There is some conceptual overlap between the Down Regulation scale and dissociation in that both involve a reduction in the experience of emotional arousal; down regulation is the participant’s attempts to control stressful experiences through reducing anxiety and emotional distress, dissociation can be viewed as a defensive process in which experiences are split off and kept unintegrated through alterations in memory and consciousness, with a resulting impairment of the self (Lerner, 1992). This suggests that there is something cognitively different occurring in dissociation than in down regulation, which justifies keeping dissociation as a separate category under the Cognition rather than
the Affect scale. In the traditional AAI coding system Down Regulation has been the hallmark of the dismissing attachment style, whereas dissociation has been captured under the unresolved classification, also suggesting that these strategies are used by participants in different ways (Main & Goldwyn, 1998).

Qualitative analysis

Content analysis revealed important non-verbal descriptors that can be used to elaborate further the coding manual. In particular non-verbal information was especially relevant for the dissociation and confused/bizarre subcategories within the existing Cognition scale. A further category of Regression also emerged from the data. This came from the observation that participants sometimes adopted a childlike demeanour or voice tone or used childlike language, particularly when discussing difficult or traumatic experiences in childhood. Regression as a defense mechanism has long been described in the psychoanalytic literature and dates back to Freud (1900). It involves a move back to older psychic structures and the use of more primitive defenses and methods of expression and has been seen to occur during the analytic process when the patient is under stress (Bateman & Holmes, 2003). Other theorists have proposed that drive regression represents a pull back to earlier modes of ego functioning associated with pleasure and feelings of safety (Sandler & Joffe, 1965b). The AAI can place participants under much stress and the association between emotional stress and regression can clearly be seen in the high level example given in which the participant describes the normality of witnessing domestic violence as she was growing up. This phenomenon is also described under the passive subcategory of preoccupied attachment in the traditional coding manual in which statements that appear in childlike form grammatically are captured (Main
& Goldwyn, 1998). This new category therefore seems to capture an extreme version of the inability to move beyond a sense of involvement with early attachment relationships described by the ‘preoccupied’ category of the traditional manual. Future versions of the coding manual could benefit from the development of a description of regression within the Cognitive scale or perhaps as a separate scale. Regression and dissociation were only seen in the clinical group with the exception of one very mild example in both cases.

In summary the Cognition scale was very successful. It had good reliability and distinguished between the clinical and non-clinical group to a highly significant degree. Non-verbal information was shown to be very important in rating features of the Cognition scale that are highly relevant to the PD group. Therefore, to improve the scales further it is suggested that examples of non-verbal behaviour from the qualitative analysis are added in to the scale descriptions.

4.4 Limitations of the study

Threats to generalisability of the results (external validity)

A number of factors made recruiting a representative non-clinical control group sample difficult. Adverts for the control group were placed in GP surgeries and community centres, job centres and shops in the area of the main West London clinic used for the recruitment of the PD sample. Adverts were also placed around the university and on the psychology department online participant pool which is accessible to the general public. However, the majority of participants came via the university which may be a contributing factor in the discrepancy between the educational level and average age of the clinical and the non-clinical groups. A more
representative group of participants from the community was difficult to recruit probably because of the length of the interview and the requirement to arrange a time to meet in central London during university opening hours to participate. However, demographic differences between the clinical and non-clinical groups were shown not to be significantly predicting the variance in the Affect and Cognition scores, with group being the only significant factor.

The control group also appeared to be somewhat self-selecting, with a high proportion of controls reporting childhood abuse or difficult childhood experiences. Some controls explicitly stated that they had seen the interview as an opportunity to discuss their difficult childhood. Although all non-clinical participants did not reach criteria for any of the PDs in the DSM-IV, some of them were high scoring on the coding manual scales, which may partly be explained by the overrepresentation of difficult childhood experiences in this sample. Participants were not screened for having a history of mental health problems or for DSM-IV axis I diagnoses so it is difficult to comment on how other mental health problems might related to scoring on the alternative coding manual.

Our PD sample were all recruited through specialist clinics and the majority of them scored for more than one PD, and mostly for PD across all three clusters of the DSM-IV, which illustrates the difficulties associated with co-morbidity across the DSM clusters (Lenzenweger & Clarkin, 1996). Recruitment of the clinical sample proved difficult and as a result this group was fewer than 30. This was not ideal for the purposes of having adequate power to detect effect size in the study. A larger reliability sub-sample would also have been ideal, but we were restricted by the
number of participants we could recruit within the time frame to complete different stages of the project.

Although much effort was made to ensure that the coders were blind to participant group through disguising the interview setting as much as possible and giving the participants randomly selected numbers to identify them, it was difficult to disguise fully participant group. In particular details of the participants' psychiatric history were often mentioned during the course of the interview and childhood histories were often quite extreme and easy to differentiate from the non-clinical control group. In this respect having a non-clinical group with some difficult childhood experiences probably helped to disguise the groups.

**Improving validity**

Having a third group of clinical participants without PD would have been valuable, not only to disguise the PD group but also to test whether high scoring on the alternative coding manual was specific to PD or is also seen in other clinical populations. This would further help to test the validity of this measure.

**Implications of the findings**

This study demonstrates that the attachment experiences of individuals with severe PD can be described and classified and distinguished from non-clinical participants, and therefore that some of the constraints of the traditional coding system with this group can be overcome. Producing a reliable and valid system of classifying attachment experiences in PD groups opens the door to future research into PD and
attachment styles including how specific PD categories in the DSM-IV relate to the new coding system.

The current manual provides a profile of scores across 18 scales rather than a single category. This produces an individual attachment profile which may be more informative in targeting treatment than a diagnostic category that focuses on surface behaviours rather than the underlying cognitive structures and the meaning of the behaviours (Kernberg, 1996).

The finding that the reliability of the coding manual was improved through the use of video coding has implications for all interview-based procedures with PD participants, and emphasises the need to consider contextual factors when understanding behaviour with this population.
5.0 References


Part 3: Critical Appraisal
Introduction

I hope to use this paper as an opportunity to reflect on the process of designing and conducting research in a clinical setting as well as what I personally have learned from the research process as a whole. I also intend to extend the discussion section of the empirical paper to explore in greater depth some of the strengths and limitations of the study and the extent to which it is able to address the limitations of the traditional coding manual with a PD group. Finally I outline some of the implications of this research for the field of PD and attachment research.

This project was a joint project conducted by myself and another trainee clinical psychologist as well as a PhD student.

Extended discussion: Overcoming the challenges of designing and conducting research in a clinical setting

Recruitment

We faced a number of challenges in designing a research study within the constraints of time and of working within an NHS setting. One of the major challenges for this study was recruiting the full clinical sample and our ambitions had to be scaled back as the practicalities of recruiting a PD sample became apparent. I learned the importance of building good links with clinicians and services when recruiting from a busy NHS setting. We found that it was extremely important to promote our research at meetings within the service. Recruitment of the PD group was made easier when we gained ethics approval to extend the recruitment to the service for
which my co-researcher was currently working. The established relationship that she had with staff and her understanding of the service structure and demands on staff within the service, proved crucial for setting up good research links with the department.

Establishing trust with potential clinical research participants was also a challenge as our research required that they discussed aspects of their experiences that were potentially very distressing for them and a number of potential clinical participants did not feel able to take part in the study. We relied on the clinical judgement of the staff in the service as to whom to approach and we found that it was very beneficial to allow the participants time to discuss the pros and cons of taking part in our research with their key-workers before making a decision as to whether to consent or not. It was also very important to stress participant control over the interview process and their right to not answer questions that they did not want to and to terminate the research if they felt distressed. We found that meeting participants in person or making phone contact with them to discuss the patient information sheet, and giving them the opportunity to ask questions was also very important in building participant confidence in us.

A great deal of flexibility was necessary in arranging appointments for the clinical group as many interviews had to be rescheduled at the last minute if participants did not feel able to come and also to fit around participants’ other commitments and childcare problems and we tried to set up interviews at times when participants were likely to be in the department for other appointments.
Recruitment of the non-clinical group also presented some challenges. Our target sample for the non-clinical group was a group matched as far as possible to the clinical group in terms of age, gender and social economic status as well as other demographic factors. However, this proved difficult as time constraints meant that we had to recruit much of the non-clinical sample before the clinical sample and so had to estimate what our demographic range might be from the few clinical participants that we already had. We attempted to match the samples by recruiting around the areas of the clinic through GPs and community centres. However, we found that only a couple of volunteers came forward this way. Retrospectively it would have been beneficial to build up links with local community services to promote our research in the way that we were able to with NHS services. Over half of our non-clinical group were, therefore, students from UCL. Although we were able to control for some of these differences between groups statistically I recognise the limitations of recruiting a convenience sample as a control group.

**Challenges with the measures and coding**

We used the SCID-II questionnaire (First, Spitzer, Gibbon & Williams, 2002) as a measure of self reported personality disorder. Originally we hoped to screen the control group just with the questionnaire but we found the measure to be very sensitive with many of the control group reaching criteria for PD when the questionnaire was used on its own. We therefore decided to follow up all questionnaires with the SCID-II interview rather than excluding non-clinical control participants who scored on the questionnaire. This revealed a tendency for the control group to over-report difficulties. It is possible that the control group’s responding was partly influenced by their perception that we were looking for
difficulties as part of the study. However, it also raises some of the difficulties of relying on an individual’s perception of their own personality difficulties alone. With the clinical group we used a combination of sources to make the judgement as to whether they met criteria for PD. We relied on the clinical judgement on the part of clinicians in the service who had assessed participants for their treatment service, and we screen ourselves using the SCID-II questionnaire with the interview to check for the DSM-IV criteria for PD.

A project that aims to develop a coding manual aims to achieve agreement between raters as to what is observed so that qualitative information can be reliably transformed into quantitative data. Boyatzis (1998) described the development of codable information as a ‘way of seeing’ in which we attempt to fit a pattern or theme to seemingly random data. However, observational analysis can never be completely neutral. The researcher’s perspective on the data is partially influenced by their own personal experience, beliefs and training which in turn may impact what is ‘seen’ in the data. It is interesting to think about how the personalities and experiences of the three coders affected their perceptions of what constituted a ‘normal’ or ‘healthy’ experience or reaction in the interviews with participants. The alternative coding manual that we were testing was designed to capture the range of attachment experiences described in both a normative and non-normative sample. Therefore, coders will also have a profile on the scales which may create a bias in rating the interviews of others. Differences in our training background and experience may also have affected our ratings. Two of the coders were clinical psychology trainees whereas the third had more extensive psychodynamic training and experience. There were also language and cultural differences between the
coders. It is therefore, important to be transparent about how our own subjective experiences may have affected our perceptions of participants' experiences, and discussion about examples whilst training on the scales was really valuable in challenging some of our preconceptions.

**Addressing the difficulties with the traditional AAI coding manual with clinical samples**

The development of the new coding scheme came about partly as a response to the limitations of the traditional AAI coding manual (Main and Goldwyn, 1998) with non-normative populations as identified by Turton, McGauley, Marin-Avellan, Hughes (2001) who interviewed and coded 45 Personality Disordered offenders using the traditional AAI coding scheme. These limitations fell under three main categories; extreme attachment related experiences, psychological or psychiatric state-of-mind at the time of the interview, and factors relating to the context in which the interview was conducted (Turton, et al., 2001).

The authors found that the attachment experiences of the forensic population that they interviewed were often so extreme that some of the questions of the interview were not appropriate. For example, participants sometimes had experiences of institutional care, or of having multiple caregivers. Alternatively some participants were unable to identify any attachment figures due to the level of deprivation in childhood (Turton, et al., 2001). Attachment representations often became contradictory or confusing so that making sense of the narrative was difficult (Turton et, al., 2001). The alternative coding manual attempted to capture these features of the interview, which had previously been regarded as threats to the validity of the
traditional manual, as clinically informative information. Therefore, measures of coherence of narrative and attachment representations were captured under the Cognition and Self-Other scales. Complexity of attachment history was included in scales such as the non-attachment and over-extended attachment subscales of the Relatedness scale.

Turton, et. al, (2001) also identified behaviour towards the interviewer as a factor which threatened the validity of coding using the traditional coding manual by drawing the interviewer into the process in a way which threatened their neutral stance. For example, extreme aggressive or denigrating behaviour towards the interviewer, attempting to control or disrupt the interview process and a fearful sense of failing to please the interviewer. However, these aspects of cognitive and interpersonal functioning are highly relevant to the problems experienced by participants with Personality Disorder. The new scales therefore attempted to capture these behaviours within the interview in the coding scales. For example, aggressive behaviour towards the interviewer was rated under the External Aggression scale and sense of failing to please under the Self-Undervaluation scale.

The current study was able to show that most of these features, described as problematic with the traditional coding system, could be described and measured and that, on the majority of the scales, they could distinguish between the clinical and non-clinical groups statistically. Comparison between the clinical and non-clinical groups was also able to show that these features could be captured as a continuum of attachment experience, with the non-clinical participants generally scoring towards the lower end of the scale. This perhaps supports a dimensional rather than a
categorical conceptualisation of PD (Kernberg, 1998), as a construct that is on a continuum with normal personality functioning.

However, other problems associated with interviewing a non-normative sample on the AAI were harder to address in the current study. For example, Turton, et al., (2001) identified participant state of mind, such as delusional thinking, impaired affect or the effects of sedative medication, at the time of the interview as another factor which made interviewing a PD population difficult. It was beyond the scope of this project to attempt to validate the measure with participants who were acutely very unwell and we interviewed only outpatients as a way of attempting to control for this. Therefore we did not see these to the same degree as in Turton, et al’s (2001) sample. However, the Cognition scale did allow us to capture delusional or confused/bizarre aspects of the narrative. This scale was quite successful with a high reliability and was able to discriminate between the clinical and non-clinical groups. Nevertheless, it remains difficult to distinguish the participant’s state of mind in relation to their attachment experiences from the more temporary states of mind that may be seen at the time of the interview as a result of acute symptoms of mental illness.

Turton, et. al (2001) also found that the population that they interviewed had often rehearsed a biographical narrative many times with professionals when taking a psychiatric history or in the course of therapy, making it harder to ‘surprise the unconscious’. Although we originally attempted to only recruit clinical participants from the waiting list for treatment rather than participants who had already received treatment, due to the constraints of recruiting a large enough clinical sample this was
not possible in all cases. It would therefore, be an interesting future study to compare AAI interviews conducted on a clinical group at different stages of treatment, and indeed to assess whether therapeutic input decreases scoring on the scales as might be predicted.

The current study was able to address many of the limitations to the traditional AAI coding scheme with this clinical population. However, some of the more contextual factors were difficult to control for and future research may wish to specifically control for or to focus on these areas in the ways suggested above.

Learning from the research process

Working collaboratively in research pros and cons

This research was a joint project with another trainee clinical psychologist and a PhD student. Working on a joint project had several advantages. Sharing the workload enable us to embark on a project that was much more ambitious than we would otherwise have been able to. The pilot study was completed by the PhD student prior to us joining the project and was useful for helping us to focus our ideas from the beginning. It also allowed us to reduce the work involved in the preparation to start the project as we had only one ethics application between three of us and we could each take responsibility for setting up different aspects of the project.

Joint working is also important for the sharing of ideas in research. An important part of the process of qualitative or observational analysis is providing ‘credibility checks’ by examining the data from multiple and varied perspectives (Elliot, Fischer,
Rennie, 1999). The continuous process of discussion about the interview data was essential, not only in generating ideas for the development of the study design and the initial revisions of the coding manual prior to the reliability phase, but also through the process of training on the scales and in thinking about the findings of the study. Working with other researchers was also very valuable in terms of providing each other with support and help with difficulties that arose over the course of the study and with the pressures of conducting research.

However, where there is more than one researcher with competing timelines for the completion of the project and different research agendas these need to be negotiated and balanced. The tight time frame for the completion of the DClinpsy thesis caused some difficulties in the planning of recruitment and of completing the reliability phase of the study. Retrospectively there was a need for more realistic planning in relation to our research goals and a more open discussion about the progress of recruitment and work divisions from the start.

**Using an interview method**

One of the great benefits of using an interview method of research was the richness of the data that it provided. Not only were we able to analyse the data quantitatively to examine the reliability and validity of a new measure but also to go back to the interview data to describe what was seen in more detail, which in turn generated more hypotheses and ideas that could be fed back into the manual to improve it further. I chose to look at non-verbal behaviour because this was new information that our video data allowed us to capture with this clinical group and would, therefore, be very interesting for an exploratory analysis. It is hoped that the
categories that emerged from the content analysis will help to enrich the descriptions in the coding manual which will hopefully improve the reliability of future versions.

However, one of the greatest challenges of conducting a content analysis on the data was the theoretical perspective from which the coding manual was originally developed. The manual was developed from a psychodynamic framework and I found it difficult to separate myself from this perspective when going back to the data to look at it qualitatively. Inevitably I think the theory that I had read to help me understand and develop the manual in the beginning must have greatly influence what I was able to see in the data at the end (Boyatzis, 1998). This is a difficult question for research as to whether theory is an obstacle to, or as others have argued, a necessary precondition to understanding the world, and the basis of good research practice (Parker, 2005). However, it is essential to clearly own your perspective in qualitative research (Elliot, 1999), and I have tried to do this throughout the project.

**Balancing the roles of researcher and clinician**

The Scientist-practitioner model emphasises the scientist and practitioner roles as two separate functions that clinical psychologists should fulfil (Barker, Pistrang & Elliot, 2003). However, I found that these two roles were difficult to divide in a project which involved interviewing participants about potentially distressing experiences, and that having some clinical experience was important in helping me to think about, and to balance some of the ethical dilemmas that arose during the course of the research.
One of the hardest challenges in balancing the role of the researcher and the role of the clinician was in listening to participants recalling distressing memories outside of a therapeutic context. Taking part in interview research can prompt participants to think about things that were not previously in conscious awareness, or to highlight to them contradictions in attitudes or beliefs or to bring to light feelings of resentment or regret which were not previously recognised or labelled (Willig, 2004). A balance, therefore, had to be drawn between facilitating disclosure of information that may be upsetting for the participant, but which may also be interesting for the research, and protecting the participant in the knowledge that they are not going to have an ongoing therapeutic relationship with the researcher. In the role of a clinician information is asked in a therapeutic context from which the client is hoped to benefit, but in asking for disclosure as a researcher in the current study it was done with the awareness that there would not necessarily be follow-up therapeutic work with the participant.

Although this situation only arose once over the course of the interviews, it proved to be a greater dilemma with the non-clinical group as all of the clinical participants were already engaged with services. Many of the non-clinical participants who volunteered described very difficult childhood experiences, which raised interesting questions about how participants perceived that they may benefit from taking part in psychology research. Some directly commented that they saw the opportunity to take part in the research as having some therapeutic benefit for them, and were open about the fact that they had come forward specifically to talk about difficult childhood experiences. I felt that having some clinical experience was very beneficial in helping me to make judgements about how best to manage this situation ethically. It
became very important to leave time at the end of the interview to debrief and to ask participants about how they had found the process of talking about their childhood experiences. Good research supervision was also important and we discussed with our supervisor what information to provide non-clinical participants with in terms of seeking further support if they felt that they needed it.

I also felt that I gained a lot of clinical experience through the process of conducting this research. It provided the opportunity to listen to and to think about the very detailed and candid accounts of childhood experiences that the AAI provides. Interviewing the non-clinical sample also gave me more of a sense of how these accounts differed between the clinical and non-clinical groups, but perhaps it also brought to life a sense of how there was no standard or ‘normal’ childhood for either of the groups. This perspective is, perhaps, easy to lose when you are used to asking questions about childhood experience only within a clinical setting. I also learned a lot about psychodynamic theory and theories of PD through researching the background literature and training on the coding scales.

Implications for the future

The current study showed the importance of using video data for reliable measurement with the alternative manual for the AAI. Contextual and affective information proved crucial in understanding the meaning of what was said in the narrative with this population. This is a finding that could be extended to other interview based research with PD clinical groups, and may also prove useful with other populations.
Many participants in psychiatric populations are assigned to the cannot classify category of the traditional AAI coding system, which is too broad to provide sufficient specificity to be informative (Turton, et, al., 2001). It is hoped that the use of a profile of scores across 18 scales rather than a single attachment category will provide better specificity of attachment constructs to particular types of PD. The new coding manual also produces an individual attachment profile which, it is hoped, will be more informative in targeting treatment than a diagnostic category that focuses on surface behaviours rather than the underlying cognitive structures and the meaning of the behaviours (Kernberg, 1996).

**Summary**

This paper has discussed some of the challenges that arose in conducting research within a clinical setting and outlines some of the ways that I feel I have learned from this process. It is important to take a reflective position when conducting observational and qualitative research and collaboration with co-researchers was essential in balancing different perspectives on the data and in generating ideas to further the development of the coding manual. Taking the role of a clinician proved useful in balancing ethical dilemmas that arose over the course of the research, but also learning from the research process proved useful in gaining clinical experience and knowledge.

It has been shown that the alternative coding manual for the AAI which has been developed through this study for use with people with Personality Disorders is able to address many of the limitations of the traditional coding manual with this population. The study showed that the extreme attachment experiences, interpersonal
styles and cognitive features that threatened the validity of the traditional AAI coding manual with this population could be described and measured within the new manual, and that the current study has gone some way towards establishing the validity and reliability of the new scales with this clinical group. It is hoped that the rich data that emerged from content analysis of the video data will help to further improve the reliability and validity of future versions of the manual. Future researchers may wish to extend the use of the manual to other clinical groups, and perhaps to validate the measure with the type of forensic inpatient group that first raised the issue of the validity of the traditional coding manual with PD participants.
References


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Appendix I- Project division

The current project was a joint project between myself, Tanya Lee (UCL trainee clinical psychologist), and Anouschka Buettner (PhD student). Manual revisions, recruitment, interviewing and coding were conducted jointly; analysis and write up were conducted individually.

Breakdown of work division

Manual revisions: All three researchers contributed equally to the revisions of the manual prior to the reliability phase of the project. The development of the description of non-verbal behaviour in the Affect and Cognition scales was conducted by me.

Recruitment: Recruitment of the non-clinical sample was carried out by Tanya Lee and me. Anouschka Buettner recruited 11 of the clinical participants and Tanya Lee recruited 10. Three of the clinical participants were recruited via the community sample by Tanya and me.

Interviewing: 25 of the non-clinical participants and 13 of the clinical participants were interviewed by Tanya and I. Anouschka interviewed five non-clinical participants and 11 clinical participants.

Coding: All three researchers coded the 14 videos used to calculate reliability on the manual. The rest of the 40 videos were divided equally amongst the three researchers to code.
Appendix II - the revised coding manual with non-verbal data included

PSYCHOANALYTICALLY INFORMED PERSONALITY DISORDER CODING MANUAL FOR THE ADULT ATTACHMENT INTERVIEW

- Third Version -

December 2006
AFFECT:

DOWN REGULATION
UP-REGULATION

DESCRIPTION OF SCALE

The interview inevitably elicits experiences which may be expected to arouse strong affect, both positive and negative. For example, questions about experiences of rejection, separation and illness may elicit descriptions of either loving interactions with attachment figures or extremely distressing experiences. These scales assess the way the subject deals with those experiences either by reducing or heightening the emotional arousal associated to them.

CODING INSTRUCTION

The rater should carefully review the emotional state accompanying the reports. It is the subject’s current affective response and implied evaluation of the event that should be coded, and not how he/she responded at the time (e.g. if S distances self from reported reaction in past, then current reaction is what is rated). Only when this is not possible to discern, should the rater assume that the past response continues.

The rater should be alert that the significance of the event should not be defined on the basis of response.

CODING AFFECT USING VIDEO DATA

CATEGORIES OF AFFECT

Visual and voice aspects of care affect affect groups are described below with examples of low and high level expressions of each.

NEUTRAL AFFECT

Neutral affect, or lack of strong affective response may be shown through a lack of facial tension and a lack of indicators of other affective states alongside neutral voice tone with regular pitch and rhythm and smooth steady body movements with no strong gestures.

POSITIVE AFFECT: INTEREST/WARMTH-EXCITED INTEREST

Low level- Interest/ warmth:
Physical cues- increased volume and tempo of speech alongside warmth in tone of voice (affection demonstrated when talking about memories). Facial signs of attentiveness may be present such as focused gaze and good eye-contact. There may be some smiles although less broad with lower intensity than high-level expressions.

High level- warmth/ excitement
Physical cues- high level of positive energy will be demonstrated through rapid fluctuations in pitch, volume and rate of speech giving an overall impression of buoyancy. Speech may be accompanied by excited hand gestures and gesticulations that may fluctuate rapidly. Facial
indicators will include indicators of excited happiness such as smiling, crows feet wrinkles around the eyes, raised cheeks and a wrinkle from the nose to the outer edges of the lips.

ANXIOUS-FEARFUL
Low-level- tension
The person may have difficulty expressing what they want to say. They may be hesitant with unfinished sentences and thoughts. For example saying 'uh', 'ah' repeatedly. Facial indicators of anxiety include a raised and straightened brow conveying worry or apprehension, lip biting and touching of the face. Body indicators include fidgeting or frequent shifting of body position, pressing against self- eg. Rubbing/writhing hands together, wiggling legs, or a sense of restlessness or mild agitation.

High level- fearful
Body and vocal signs of tension such as fidgeting will remain but may be accompanied by fearful facial expressions. These include frequent eye movements, raised and straightened brow conveying worry or apprehension alongside other facial indicators of fear. Open and tense eyes with the upper eyelid raised and the lower lid tense. The lips maybe either open and tense or drawn back and tense. In extreme cases the individual may convey the message 'I'd rather not be here right now' through turning the body outwards or looking away from the interviewer perhaps alongside automanipulation.

SADNESS-EMOTIONAL DISTRESS
Low-level-
Facial expressions indicating sadness include the brows drawn together in the centre, downcast eyes and drooping around the corners of the mouth. The voice tone may be lowered and slower in pace with some pauses.

High level-
Facial indicators of emotional distress are the same as sad facial expressions although with greater intensity of expression and facial tension. The lips may quiver and there will be crying or tears. The voice may be wavering or sound as though the individual is crying or too choked up to speak.

FRUSTRATION-ANGER
Low level-
Facial indicators of frustration or irritation include tightening of the mouth and pressing the lips together, and frowning or and angry brow without other indicators of anger. There may be a slight bobble of the head whilst speaking and the voice may be stuttering with changes in rhythm and the way certain words are stressed.

High level- anger
Facial cues for anger include the brows lowered and drawn together with vertical lines appearing between the brows. Lower and upper eyelids are tense and the upper lid maybe lowered by the action of the brows. The eyes maybe staring or bulging slightly and the lips maybe tense and pressed firmly together or open in a tense squared position. The nostrils may be flared. Lip presses, involuntary twitches or jerks, tightened jaw, clenched teeth may also be seen. Voice tone will be raised or lowered out of the normal range with changes in the way words are stressed.

EMBARRASSMENT/SHAME
Low Level- embarrassment
Facial indicators of embarrassment include downward gaze, or shifting gaze, particularly with glances to the left. There might be embarrassed smiles, which can be distinguished from amused or enjoyment smiles by their weaker intensity and the participant's attempts to control the smile.

High Level- Shame
Facial indicators for higher level shame remain the same as for embarrassment but downward gazes will be for longer and eye contact will be avoided. The person may have a hunched posture or appear tense. Voice tone may be lowered and harder to hear. The person may blush or become tearful.

MICRO-EXPRESSIONS IN THE FACE
Normal facial expressions of affect may only last for a few seconds. However, micro-expressions, lasting a fraction of a second may also occur. Although difficult to detect, these expressions may give an indication of the emotions that the person is masking or attempting to neutralise.

AFFECT:

DOWN-REGULATION

This scale aims to assess the extend to which the subject tends towards reducing emotional arousal, in particular in relation to stressful experiences

DESCRIPTION OF SCALE
This scale assesses the degree to which there is a tendency in the narrative to reduce affect. As a result, positive and negative affects, are muted.

Severe down-regulation is only expected in relation to negative experiences.

At the extreme end of this scale, the response is the explicit claim to be unaffected by a traumatic event.

INSTRUCTION FOR CODING
It is important to distinguish down-regulation as a defensive mechanism from the process of working-through.

It would be expected that traumatic events and losses would be processed and worked through to an extent with time. Working-through is evidenced by a narrative ideally containing: acknowledgement of distress and pain experienced at the time, description of changes in feelings between the childhood emotional response and the current feelings, and explanation of why current responses are less intense than hitherto. Unfortunately, many narratives that indicate such a process do not adequately describe the changes, and how they have come about; however if an explanation for the changes in affect is made plausible then the subject should be given the benefit of some doubt.

When these elements are present, the current reduced emotional arousal should not be considered as down-regulation.

This includes some allowance for the time passed since the event (e.g. discussion of the death of a grandparent s expected to have a less intense impact obvious to the observer once years have passed, but some acknowledgement of continuing grief is expected.
VIDEO CODING

The affect is muted or incongruent when talking about distressing experiences. For example their maybe an absence of affect expressions/ neutral facial expressions whilst discussing a distressing/stressful experience. More extreme responses may include laughing or smiling when discussing extreme or high-level stressful events. In particular, pay attention to micro-expressions that may convey the emotion that the individual is masking or attempting to neutralise. Eg. Wincing, fleeting sad, angry, fearful or shameful expressions.

CODING LEVEL: DOWN-REGULATION

MILD

Mild denial of the impact of events.

Affect is muted and flat.

Responses are reduced.

MODERATE

Explicitly denying or claiming to be unaffected by an otherwise stressful event

Examples:
“My father died unexpectedly, and I was quite sad about it for a while’
“Those kinds of beatings went on every day, and it did not affect me much in the end.”

SEVERE

Emphasising the positive aspect of stressful event, seemingly unaffected.

Affect is down-regulated to a point where there seems to be a complete absense of affect

Examples:
“Seeing my mother trying to kill herself taught me how to become self-reliant. It made me grow up quickly. I think I am able to be totally objective about it.”
AFFECT:

UP-REGULATION

This scale aims to assess the extent to which the subject tends towards heightening emotional arousal, in particular in relation to stressful experiences.

DESCRIPTION OF SCALE

This scale assesses the degree to which there is a tendency in the narrative to amplify affect. These affect displays can range from intense but congruent emotional arousal to a more exaggerated response to a certain event. In addition, the amplified affect may even be incongruous with the event manifested (See INSTRUCTION FOR CODING).

At the extreme end of this scale, the affect elicited by the interview is so intense that the individual can no longer regulate it normally.

INSTRUCTION FOR CODING

The severity of the event has to be evaluated in relation to the affective response (e.g., an experience of chronic abuse would be expected to be accompanied by quite extreme feelings). So, e.g., abuse experienced in childhood which still evokes overwhelming affect would be rated as mild up-regulation and not as severe up-regulation.

When the experience of being overwhelmed may be understandable, particularly if the event was recent, this response should not be coded as severe up-regulation.

UP-REGULATION vs. INAPPROPRIATE AFFECT TONE OF OBJECT RELATIONS:
Where the amplified affect displayed is not only exaggerated but also incongruous with the event described, coding on both scales may be necessary (MILD and SEVERE level).
However, incongruous affect is only coded as “Inappropriate Affect Tone” when it is in response to an object or attachment relationship.

VIDEO CODING

Look for negative affect laden facial and vocal expressions as outlined above as well as body cues indicating anxiety/tension or excitement.
CODING LEVEL: UP-REGULATION

MILD
Response somewhat intense and amplified but affect is congruent with event.

A tendency to display or relate intense affect in response to events which is understandable in terms of its direction but somewhat exaggerated in terms of its degree. (e.g., claiming prolonged distress in relation to mild criticism)

MODERATE
Response bizarre, exaggerated affect, hard to understand.

Affect is exaggerated to a point where it is hard to understand the connection with the event and/or the affect is incongruous with the event manifested.

SEVERE
Overwhelmed and disorganised by affect.

Affect is so intense that it clearly overwelms the subject currently or in the past, related in a manner that indicates that a similar reaction would take place if the event were to occur currently (e.g. unable to cope, breaks down in interview).
AFFECT:

LABILITY

This scale aims to assess the readiness with which different emotions oscillate in the course of the interview.

DESCRIPTION OF SCALE

Lability of affect concerns a difficulty in modulating affective states during the interview, which is independent of a general tendency to up or down regulate the emotional state. Some vulnerable people are unable to tolerate the intense affect that can be elicited by the interview, and seem to be alarmed by it presumably because they cannot modulate it.

At the extreme end of the scale, this results in a marked fluctuation of intense affect. These changes are rapid and seem out of proportion and therefore difficult to relate to the content of the narrative.

INSTRUCTION FOR CODING

The interview has to be read as whole and episodes of the interview have to be taken in combination in order to make this rating.

Appropriate affect in relation to specific contents is not to be considered an indication of lability even if there are a number of episodes where affect is intense, as long as these expressions of feeling are in line with the narrative being told.

Where normal variation becomes rateable as lability is where such emotional episodes quickly trigger other affects or when the onset and offset of affect appears rapid or dramatic (e.g., anxiety may trigger anger, which in its turn may elicit sadness or manic denial or false joy).

VIDEO CODING

Look for rapid changes in affect facial expressions, posture, movements or vocal expressions eg. Raising, lowering or changing the pace of the voice.
CODING LEVEL: LABILITY

MILD

There is a somewhat sudden and unexpected change in the emotional expression. 
There is either a rapid change in the intensity of emotional expression, which is congruent 
with the event. 
e.g. subject suddenly starts to cry

Or

There is a somewhat sudden change but mild in the direction of the emotional expression, 
but this change remains within expectable boundaries.

On the mild level the subject's affective state remains stable.

MODERATE

There is a sudden change in the intensity and the direction of the emotional expression 
which is unexpected and somewhat incongruent with the event described.

A sudden change of the emotional state may be justified by the events described. 
Nevertheless the general impression created is of a heightened state of arousal and 
consequent instability

SEVERE

There is an extreme and rapid change of different affects in relation to the same set of 
events or parts of the narrative, which is completely unrelated to the narrative and 
incongruent with the event described.

These opposing affects (happy-sad, anxious-calm, angry-loving) change very rapidly even in 
relation to the same person or situation
AGGRESSION:

EXTERNAL AGGRESSION

This scale aims to assess the extent to which an individual's internal working model of relationships is infused with externally directed aggression.

DESCRIPTION OF SCALE

Externally directed aggression can be displayed in form of verbal aggression, descriptions of angry or aggressive behaviour, through the use of aggressive language or current anger with the interviewer marked by derogation, criticism, sarcastic remarks.

At the extreme end of the scale, the subject may describe violence to other or may talk or even behave in an overtly aggressive way, without apparent conflict or even with enjoyment.

INSTRUCTION FOR CODING

The extent to which an individual's internal working model of relationships is infused with externally directed aggression can be identified in the subject's

- **LANGUAGE** in the context of attachment relationships;
- **DESCRIPTIONS OF ATTACHMENT FIGURES AND ATTACHMENT-RELATED EPISODES**
- **ATTITUDE TOWARDS THE INTERVIEW OR THE INTERVIEWER**

VIDEO CODING

Look for non-verbal behaviour:
Involuntary twitches, tight muscles or posture, tight jaw, raised or lowered voice, short sighs, grimacing expression, any threatening behaviour towards the interviewer e.g. pointing gestures.

Look for **paralinguistic signs of aggression** e.g. Tutting, snorts.
CODING LEVEL: EXTERNAL AGGRESSION

MILD

IN THE NARRATIV:
On this level, the use of aggressive language is mild.
Angry recounting of episodes.

Reports of interactions in which the subject was verbally aggressive.

In the descriptions of episodes and attachment figure, which do not include aggression, the language used is unnecessarily harsh and would appear to be mildly insulting, should the person described have heard it.

The subject refers an episode of his past in which he used a verbally aggressive language.
e.g. "I was reading a psychological book a few years ago and I said to my wife Shit, that's dad".

IN THE INTERVIEW:
The subject might show mild annoyance on this level,
Exclamations, which are not directly related to the content of the narrative.
e.g. "Oh shit, I thought you wanted five adjectives that describe her!"

MODERATE

IN THE NARRATIV:
On this level, the use of aggressive language is strong and extreme.

However, the subjects descriptions of aggressive acts remain in the realm of the imagined. They are not carried our intended in reality.

Insulting descriptions with use of strong language.

Description of extreme verbal aggression and/or threatening behaviour with others.

Imagineing other's extreme verbally aggressive language.
e.g. "My parents may have said to each other under their breath The little fucker's gone, thank God".

When the subject wishes to kill somebody, but it is clear that he will not put into action.
e.g. "I I could have killed her"

IN THE INTERVIEW:
On this level, the subject shows clear signs of anger with the interviewer or the interview process.
However, the anger remains within acceptable boundaries.
e.g. the subject might argue with the interviewer or makes derogatory remarks about the interview
SEVERE

IN THE NARRATIVE:
On this level, the subject either describes to have carried out aggressive acts or states the clear intention to carry out aggressive acts.

Descriptions of violence to others involving injury and realistic risk of harm.

When the subject plans to kill somebody.
  e.g. "If I see my girlfriend, I will kill her"

IN THE INTERVIEW:
The subject shows marked anger with the interview and the interview process.
On this level, the subject has difficulties in keeping his anger under control that may lead to a disruption or at the extremity to a termination of the interview.

  E.g. the subject makes abusive remarks, threats or menacing gestures in the interview that are more or less directed at the interviewer.

AGGRESSION:

PASSIVE AGGRESSION

This scale aims to assess the extent to which an individual's internal working model of relationships is infused with passive aggression

DESCRIPTION OF SCALE

Passive aggression refers to the subject's destructive impulses that become manifest indirectly through acts of omission or commission which cause inconvenience and irritation, on in the extreme even harm, but without the subject acknowledging an intention.
The subject or others may experience disasters, which are presented as having been without an agent. There may be a forceful assertion of lack of responsibility, and helplessness in relation to repeated traumas - if it is suggested that the subject might have contributed at all, there may be an extremely angry reaction.
On the other hand, passive aggression may be shown as a lack of cooperation with the interview process which is not obviously justified by the subject's current emotional state.

At the extreme end of the scale, the interview process itself is significantly disrupted by the subject without that being acknowledged or apparently conscious.

Avoidance of eye contact or too much eye contact, smirks or smiles whilst being uncooperative with the interview process

INSTRUCTION FOR CODING

Passive aggression can become obvious in the interview in three ways:

  •  LANGUAGE in the context of attachment relationships, which may be unduly hesitant or circumstantial
• DESCRIPTIONS OF EPISODES AND/OR ATTACHMENT FIGURES, which include unacknowledged aggressive behaviour;

• ATTITUDE TOWARDS OR LACK OF CO-OPERATION WITH THE INTERVIEW PROCESS OR THE INTERVIEWER, which is not obviously justified by the subject’s current emotional state (e.g., the subject may not answer the question but talking about other things). Instances where the subject seems to be uncooperative by not answering questions, claiming a ‘lack of memory’ need to be carefully evaluated: the rater needs to make a decision whether this is a lack of cooperation (i.e. passive aggression) or part of a defensive dismissive strategy, which would not be coded as passive aggression; PLEASE LOOK FOR NON-VERBAL SIGNS TO MAKE THIS DECISION.

VIDEO CODING

look for non-verbal signs of passive aggression such as

CODING LEVEL: PASSIVE AGGRESSION

MILD

IN THE NARRATIV:
Descriptions of occasions in which the subject omitted to do something, thus causing some annoyance or irritation.

IN THE INTERVIEW:
Being unduly hesitant or circumstantial during the interview, self-effacing or indecisive.

MODERATE

IN THE NARRATIV:
Description of unacknowledged resistance or omission which clearly caused annoyance and irritation.

Description of provocations whereby the subject does not admit to having felt angry at the time, and is puzzled by the response of those around them.

IN THE INTERVIEW:
The relationship to the interviewer may be undermined by repeated implied rejection of the interviewer’s efforts.
(e.g. eliciting reassurance but ignoring it and continuing to criticise own performance)

The subject’s may be obstructing the interview to the point of diverting the interviewer from his or her task. (e.g. subject may not answer question but talking about other things)

SEVERE

IN THE NARRATIV:
The subject describes marked (unacknowledged) provocations and angry or rejecting reactions, which are bewildering and probably hurtful to other without being acknowledged by the subject.
IN THE INTERVIEW:
There is evidence of a clearly negativistic attitude within the interview itself, which is not acknowledged by the subject. (e.g. by blocking, irrelevant intrusions, sullen resistance to aspects of the demands of the interview).

This might lead to a severe disruption, so that the interviewer might have to end the interview.
COGNITION:

DISTURBANCE OF THINKING

This scale aims to assess indications of disturbances of thinking, such as confused or bizarre statements, overly detailed descriptions, perseverance of one particular theme as well as sudden changes of state and discontinuities of a subjective state.

DESCRIPTION OF SCALE

Disturbance of thinking can be observed in form of:

(a) confused or bizarre statements
Statements which are strikingly paradoxical and bizarre. Statements that do not make sense either in the context of the interview or in general, so that it is difficult to see any connection to the question just asked or the topic discussed; at the extreme end of the scale, almost all of the interview seems rather bizarre and confused

(b) overly detailed descriptions
Descriptions which are excessively elaborated or include irrelevant detail; at the extreme end of the scale the subject seems to be lost in his own narrative and unable to stop (to stick to the constraints of the interview).

(c) perseverance of a particular theme
Perseverance of a particular theme refers to the repeated intrusion of one or more particular themes; in moderate cases the topic is not only intrusive but deviate from the question. At the extreme end, the topic is completely irrelevant to the interview.

(d) Dissociation
Dissociation corresponds to a sudden shift in state. This may include instances where the subject may appear entirely unaware of what he has described shortly before. For example, the person is halfway through describing an episode, pause, then start to talk about something quite different; if reminded by the interviewer, they may seem confused. They may describe 'going blank' following a period in which they seemed very anxious or distressed, and involved with the narrative.

At the extreme end of the scale the subject becomes disoriented and confused and may no longer be aware of the context of the interview.

INSTRUCTION FOR CODING

ad a) if the subject way of recollecting seems somewhat bizarre, these incidences need to be distinguished from source memory error, which is not a cognitive disturbance and hence not coded on this scale.

Likewise, a subject being able to reflect on the odd quality of their statement is not coded here.

E.g: (subject talking about having stayed in hospital as a child) "I remember being in hospital...I can see the bed. Strange, I can see myself lying in the bed from the outside. That is strange! I shouldn't be able to see myself from the outside! That is bizarre..."
VIDEO CODING

When coding disturbance of thinking from video data signs of dissociation might include visual signs of increasing affect followed by a sudden shift to a neutral affective state (see coding affect for video data P.). Look for sudden changes in the rate or tone of the voice or pauses and hesitation which give the impression that the individual is confused. In more extreme cases the voice tone might suddenly sound ‘haunting’ or inappropriate. Also look for blank looks or confused/ puzzled or disorientated facial expressions as shown through a raised brow, or a lowered frowning brow and eye squint, or shifting eye gaze. In more extreme cases the person may appear to be absent from what is occurring in the room, briefly or for a more prolonged period and may require prompting from the interviewer to continue. The individual may appear to ‘freeze’. Eyes might be half shut or with a fixed stare and seemingly unblinking. In extreme cases the individual may appear to have a ‘flashback’ experience and may appear to be responding to stimuli unseen in the room.

CODING LEVEL: DISTURBANCE OF THINKING

MILD

(a) statements are somewhat confused or bizarre; however, the rater might still be able to make some sense of what is being said.
Slips that go unnoticed
  e.g. "I held on to my mother dress, and she was always cuddling her. But it was for more for herself"

(b) an episode is described with more detail than it is appropriate or expected; however, the subject is able to focus somehow on the main aspects of the episode being told and is able to offer a conclusive remark for a particular episode.

(c) there is some intrusion of one or more particular topics, which cause a deviation from the question being asked; however, this deviation does not come across as particularly marked and there is some relation between the question made by the interview and the topic discussed by the subject.

MODERATE

(a) statements are clearly confused, paradoxical or bizarre; they do not seem to make much sense even in the context of the episode; however, the general idea being conveyed may still be hinted.

(b) descriptions are excessively elaborated or include irrelevant detail; the subject may seem to have lost the thread of his reasoning and seems to have difficulties in concluding the answer.

(c) there is a clear intrusion of one particular topic, which appears somewhat unrelated to the question being asked; however, the subject might still be able to establish a reasonable connection between his account and the question asked by the interviewer.

SEVERE

(a) the statement seems completely bizarre, paradoxical, or incomprehensible; the rater is clueless about what the patient is trying to say.
(b) the patient describes an episode with such detail that the answer becomes excessively long and irrelevant; the subject seems to be lost in his own narrative and seems unable to stop.

(c) the intrusion of one particular topic is very obvious in the sense that the narrative content seems completely unrelated to the question being asked by the interviewer; the interviewer may even try to ask the question again in order to bring the subject back to the topic.
RELATINGNESS:  
HOSTILE GRIEVANCES

The aim of this scale is to assess to which extend the subject holds hostile grievance towards the attachment figure, which seems not justified.

DESCRIPTION OF SCALE

The aim of the of this scale is to assess the extent to which an individual believes he deserved to receive more from his primary care givers as well as assessing his level of anger and complaint. There is a general sense of resentment and of having missed out in life.

We assume that unjustifiable grievances reflect the use of primitive defence mechanisms to some extent.

Blame for one’s difficulties is located elsewhere and the individual does not recognise any responsibility on his/her part for the failures or difficulties.

The need seems to be to hold a grievance through bitterness and by focusing on events in the past that have caused psychological damage.

On the extreme end of the scale, the subject conveys a persistent sense of neglect and abandonment regarding his attachment relationships, which seems exaggerated and is largely not supported by evidence. There is no recognition of responsibility or participation.

INSTRUCTION FOR CODING

Although it is important to differentiate between justifiable complaints and unjustifiable ones, it is the general level of complaint that is rated here.

Therefore, subjects with consistent grievances are not given the benefit of the doubt but coded here, even if there seems some justification for their complaints.

Only if the subjects complaints are substantiated and to a significant degree, e.g. if a caregiver has clearly been neglectful and there is consistent evidence for this throughout the interview, the complaint is likely to be justifiable.
CODING LEVEL: HOSTILE GRIEVANCES

MILD

The subject complains about some aspects of his attachment figure or upbringing.

However he or she is able to reflect on it, e.g. he or she says why they think their parents did the things that they did.

The subject relates his or her complain to reality as well as to any misperception. (e.g. the patient realises that even if he felt rejected he may not have been). He or she explains how feelings of rejection have arisen.

The subject expresses some criticism, however, on the mild level, anger is not present. There is only mild blame for one’s difficulties.

MODERATE

The subject clearly complains about aspects of his attachment figure or upbringing.

The subject’s ability to reflect on it, if at all, is very limited. Examples of neglect are easily recalled

On the moderate level, the anger is pervasive but also moderate.

SEVERE

The subject seems to be completely absorbed in his complains about aspects of his attachment figure or upbringing.

On the severe level, the anger is invasive and marked.

The subject recalls many examples of being let down, neglected and abandoned, but these are not compelling to the reader.

The subject reports of having felt like that since early childhood.

The five adjectives chosen of both parental figures may link to neglect and abandonment or extremely negative aspects without any balance.

There is evidence that the individual’s expectations should now be met (i.e. if they need something it should be provided). When they are not met, the blame is located elsewhere
RELATEDNESS:
IN-APPROPRIATE ATTACHMENT

This scale concerns the inappropriateness of attachment relationships which can be expressed in two different ways:

Either as:

NON-ATTACHMENT

or as

OVER-EXTENDED/ GENERALISED ATTACHMENT

INSTRUCTION FOR CODING

These two strategies are not necessarily mutually exclusive but can occur simultaneously. Therefore in-appropriate attachment is coded separately by the following two sub-scales, Lack of Emotional Investment and Over-Investment of Attachment

RELATEDNESS:
IN-APPROPRIATE ATTACHMENT

NON-ATTACHMENT

This scale aims to assess the lack of emotional investment in attachment figures

DESCRIPTION OF SCALE

This subscale concerns - at least at the surface level of the narrative - the inability to describe the relationship with the caregiver as an attachment relationship.

Instead, there is an apparent neutrality which is inappropriate to the attachment context.

At the milder end of the scale, there may be lukewarm attachment to one or more figures, but a stronger relationship with at least one available caregiver.

At the extreme end of the subscale, all primary attachment figures will be emotionally unimportant, or there will appear to have been no relationship.

For example, the caregiver is described as a friend or as an acquaintance, in unemotional terms, and is not apparently seen either as a secure base or as a source of protection or understanding.

However, the descriptions do not indicate hostile relatedness, masochistic submissiveness or any other intense pattern of relationship.
CODING LEVEL: NON-ATTACHMENT

MILD

The subject speaks about experiences that would usually evoke strong attachment responses (e.g. separation, illness or death of attachment figures) with some emotional detachment.

Episodes of contact with the attachment figure are described with some elaboration but in bland terms.

There may be recourse to clichés or stereotyped descriptions of activities.

In general on this level, descriptions of primary caregivers are flat and are somewhat lacking in emotional investment; the used terms could equally apply to less important relationships.

MODERATE

The subject may explicitly state the lack of a relationship with an attachment figure, or state that they did not need the attachment figure.

There is a lack of elaboration and depth to descriptions of episodes, which suggests that memories of contact with that attachment figure are impoverished, they have little current emotional impact and are not remembered as having been formative at the time.

However, on the moderate level, there are signs elsewhere in the interview that the relationship with the parent had importance in some ways or at some times.

SEVERE

The subject may explicitly state that there was no relationship with the attachment figure, or that they did not have an attachment figure.

Events with a caregiver are described in highly impersonal terms, as routine, expected delivery of care.

Events which would normally evoke anxiety about loss of the attachment figure (such as prolonged separation) are described without current feeling, or memory of earlier distress.

On this level, there appears to be a complete dismissal of the importance of the relationship with this caregiver in the subject’s development, whether explicit or implied by the descriptions given.

There is no indication elsewhere in the interview that the subject might have ever valued this relationship beyond the material benefits which it may have brought (e.g. “She provided my meals, and did all the things that mothers are supposed to do”).
RELATEDNESS:
IN-APPROPRIATE ATTACHMENT
OVER EXTENDED/GENERALISED ATTACHMENT

This scale aims to assess an over-investment or generalization of Attachment in ordinary relationships

DESCRIPTION OF SCALE

This subscale concerns the tendency to develop feelings of attachment towards otherwise non-significant others.

Figures that the subject has only met occasionally are treated as attachment figures and considered as a source of security (e.g., hairdresser).

There is an apparent over-investment, which is inappropriate to the relationship context.

At the extreme end of the subscale, virtually all ordinary relationships are regarded as emotionally important. For example, a faint acquaintance is described in highly emotional terms, and it is seen as a secure base and as a source of protection or understanding.

CODING LEVEL: OVER EXTENDED/GENERALISED ATTACHMENT

MILD

The subject speaks about experiences that would usually not evoke an attachment responses with some emotional investment which would be appropriate for attachment relationships.

Episodes of contact with acquaintances or figures that the subject only met occasionally are described in emotional terms appropriate for more intense relationships.

Descriptions of people that would normally be considered non-significant indicate emotional investment; they use terms that could equally apply to far more important relationships

MODERATE

The subject may explicitly state the importance of an otherwise ordinary relationship as if referring to an attachment relationship, or state that the need for that person as he or she were an attachment figure.

There is a vividness and depth to the description of episodes, which suggest that memories of ordinary relationships have current emotional impact and are remembered as having been very personal at the time.

However, there are signs elsewhere in the interview that there are faint relationships which remain within a more ordinary framework.
SEVERE

Events with otherwise non-significant figures are described in highly emotional terms, involving a special quality of care.

Events which would not normally evoke anxiety (such as separation from acquaintances) are described with strong feeling, or memory of distress.

There appears to be a complete engagement in the relationship with otherwise non-significant people and this relationship is considered as having importance in the subject's development, whether explicit or implied by the descriptions given.

There is no indication elsewhere in the interview that the subject might have had a relationship which was not over-valued and burdened with expectations.

RELATEDNESS:

ANXIOUS DEPENDENCY

The aim of this scale is to assess subjects who describe a continuing childish dependent relationship with one or more caregivers.

DESCRIPTION OF SCALE

Anxious dependency describes a continuing need for the attachment figure, to give advice or support, and there may be a dread of disapproval, due to fear of loss of love.

The hallmark of this pattern of relating is inappropriate closeness, with often undue intimacy, and the sense that the subject feels he or she would not be viable without the closeness to the parent.

There may be resentment at the perceived intrusiveness of the parent and lack of privacy, however, this is felt to be inevitable, and beyond the subject's power to change.

At the extreme end of the scale, the relationship is likely to be infused with anxiety about loss of the attachment figure which can lead to a concrete fear of his or her death. The anxious dependency between subject and attachment figure is often mutual.
CODING LEVEL: ANXIOUS DEPENDENCY

MILD

The subject worries about the parents’ reactions, wanting approval and wanting to maintain closeness. The subject’s self-esteem may be dependent on this.

Descriptions of fear of separation, or lack of ordinarily increasing independence in childhood.

There may be signs of reliance on parental encouragement, or presence at an age when this has become uncommon.

The current adult relationship with attachment figures may be described as like the childhood relationship, though there may be some reversal of caregiving roles.

However, on the mild level, these descriptions are balanced by others in which there have been attempts by the child or the adult to overcome the dependence.

MODERATE

One or both parents are experienced as intrusive (e.g. commenting on what the subject needs to do, or has not done).

Pervasive need for advice or support.

There is explicit fear of the absence or death of the parent.

The parents are not remembered as having promoted independence, or are portrayed as having undermined confidence and self-sufficiency (e.g. by needing the child to stay at home to help the parent, or overprotective concern with dangers in the outside world).

SEVERE

The subject states that he could not manage without the caregivers’ support, and is evidently frightened of a situation when this might not be available.

There may be a striking lack of questioning of a clearly pathological relationship (e.g. the subject describes family having been very different from all peers in childhood but sees this as appropriate given the circumstances).

The dependence of caregiver on offspring is mutual and often difficult to disentangle (e.g. who is ill and looking after whom).

*e.g.* “How would I be able to cope, if anything happens to them, I didn’t know, I’d probably commit suicide”
RELATEDNESS:

OSCILLATION

The aim of the of this scale is to assess the extent to which an individual oscillates between a desire for or actual closeness and a need to withdraw to a safer distance.

DESCRIPTION OF THE SCALE/INSTRUCTION FOR CODING

Oscillation describes an inability to find an appropriate emotional distance which does not lead to anxiety.

Hereby, closeness leads to a feeling of suffocation and being trapped, whereas greater distance leads to fears of being alone and of being abandoned.

Each anxiety is likely to mount over time, until it becomes unbearable and will then lead to a change in mood and intimacy (at the milder end), or severance (or resumption) of the relationship at the moderate-severe end.

This can lead to difficulties in modulating the perception of intimacy, so that a new relationship is felt to be immediately very close and special, and later as intolerable and dangerous.

At the milder end, there is sustained attachment to the same person, which can withstand the oscillations.

At the extreme end of the scale, relationships are likely to be severely disrupted by the changes in dominant anxieties and reactions to them, so that there are either shifts in primary attachment figures and/or in the closeness of each relationship.

CODING LEVEL: OSCILLATION

PLEASE NOTE: TO BE CODED FOR THE INTERVIEW AS A WHOLE

MILD

Close relationships are described as showing some fluctuation between attachment behaviour - showing features of strong positive affect, self-disclosure, spending a lot of time together and minimisation of problems in the relationship, followed by withdrawal of emotional investment, negative affect, lack of confiding.

This change cannot be properly accounted for by the subject, it seems to reflect an internal cycle rather than external changes.
MODERATE

The shifts between attachment behaviour and withdrawal of emotional investment are more rapid and even less linked to understandable external triggers.

These shifts are more pronounced, from intense positive relating to violent dislike or denigration of the former attachment figure.

Most attachment relationships are likely to be affected by this pattern over time. Alternatively, there may be phases where the subject completely disengages from the relationship.

Some subjects may swing between closeness to one attachment figure, closely followed by intimacy with the other and the rejection of the first (e.g. mother loved and father hated then father cherished and mother despised).

SEVERE

The subject’s descriptions include evidence of major disruptions of important relationships through dramatic swings, from intense intimacy and dependence to hatred or paranoid anxiety and a need to take a distance or destroy the relationship.

Here, oscillation is rapid and within the same relationship. The subject can be neither intimate nor distant for a significant period.

All attachment relationships are likely to be destroyed by this pattern over time.

There may be dramatic gestures, such as suicidal attempts or serious self-harm, thinly veiled as attempts at regulating the distance within the relationship.

RELATEDNESS:

LACK OF CONCERN TOWARDS THE OTHER (EMPATHY)

This scale aims to assess the subject’s lack of awareness of others as separate and independent beings, with feelings, needs and rights

DESCRIPTION OF THE SCALE

Lack of concern towards the others involves a relative absence of conscious feelings of guilt, which could be part of a more general lack of emotional responsiveness.

There may be a range of indications: callousness, selfishness, cruelty, lack of concern about the potential impact on the other person of one’s actions, enjoyment of the other’s suffering.

Even if the impact of the subject’s actions on the other is noticed, it is not felt to be important in comparison with the subject’s own needs.
In some cases there may be awareness of the other's feelings, but these are then manipulated or exploited rather than responded to with concern.

At the extreme end of scale, the subject either clearly enjoys the other's suffering or even deliberately causes it.

**INSTRUCTION FOR CODING**

Moderate lack of concern includes exploiting the vulnerability or the suffering of others which may be part of a more general opportunism.

This is not inhibited by an awareness of their suffering and may even be accompanied by accounts of harsh treatment suffered by the subject, which may be portrayed as excusing his or her own callousness – the rater must not be tempted to overlook the lack of concern shown by the subject and should be coded as moderate.

**CODING LEVEL: LACK OF CONCERN**

**MILD**

The subject does not show emotional responses congruent to a description of others' distress or vulnerability (e.g. there is limited sadness when discussing how a loss affected others, or guilt when describing having hurt somebody).

There is a tendency to emphasise - more than expected from the questions - the subject's own needs considerably more than those of attachment figures or others in the family.

There may be an inappropriately dismissing remark about somebody else's suffering, perhaps intended to be humorous. The subject may alternatively come across as unsympathetic to others' feelings.

**MODERATE**

There is a marked incongruent response (e.g. laughter when describing the illness of an attachment figure).

The explicit denial of concern or guilt, or a description of an interaction with the attachment figure when such a reaction was shown.

A description that contains an account of exploiting the vulnerability or suffering of others, but this does not yet reach a level of cruelty – it does not intensify the suffering of the person concerned.

The subject may come across as intentionally causing suffering, though of a mild sort (e.g. a subject who describes having deliberately increased his mother's distress at separation, by hiding when the parents came to collect their children).

**SEvere**
There is either clear enjoyment of suffering, or deliberate causing of suffering with no concern, or exploitation of suffering which would increase the distress, adding insult to injury. For example, there may be deliberate cruelty to animals causing significant pain or lasting harm.

Any account of causing severe injury or death, without accompanying guilt or disturbing affect, would also be considered a severe sign.

*e.g. “I pride myself in reducing my father to tears”*

PLEASE NOTE FOR CODING ON THIS LEVEL:
A description is more likely to be a severe indicator if it appears still to be felt in the present. Such descriptions are also likely to chill or jar on the reader, it is hard to have any empathy for the subject’s reaction.

In the context of a situation involving life and death or catastrophic injury, then even a mildly callous reaction (which does not exacerbate the distress or injury) would be seen as a severe indicator.
SELF:

LACK OF SELF STRUCTURE/ COHERENCE

Extent to which the self is deliberately excluded from the narrative.

DESCRIPTION OF SCALE

Lack of Self-Structure/Coherece applies to individuals who experience the exclusion of the self as ‘natural’ and there appears to be little call for its restoration. The self has withdrawn from relationships and cannot define itself in the absence of these.

At the extreme end of the scale, there is an absence where the person ought to be. The self is not prominent in these interviews in either an over or undervalued context. A sense of painful emptiness may result.

INSTRUCTION FOR CODING

LACK OF SELF-STRUCTURE VS. UNDER-VALUATION:
In more moderate cases there is an implicit under-valuation and there might be a profound dependence on others’ views of the self. However, there is no pull on the part of the interviewee for reassurance as it would be characteristic for Under-Valuation

CODING LEVEL: LACK OF SELF STRUCTURE

MILD

On this level the subject tends to focus on other persons mentioned in the interview rather than themselves.

Even when subjects are directly asked about their own reaction the focus quickly shifts to other people in the narrative and the episode is recounted from the other person’s perspective.

The subject is puzzled, hesitant and may have difficulty in producing a convincing response, when asked directly what they have learned over-all from their childhood experiences.

There may be slips of the tongue – confusing the self with other persons - but these are monitored or corrected.

MODERATE

On this level, there is confusion in the narrative about the self. The self does not emerge as a person independent of other people.
In the narratives the identity of the subject and object may become mixed or apparently interchangeable. This may be marked with slips of the tongue, which go unnoticed.

If asked for evaluations of issues the subject may appear to have no views.

They might experience great difficulty in finding adjectives or answers to direct questions about the reasons for the behaviour of others.

SEVERE

On this level, there is an absence of meaningful material in the narrative.
In general, the interview may be very short.
The subject may appear genuinely to have little to say in response to the questions. They may be quite distressed or frustrated by their inability to respond appropriately and ask for the interview to be terminated.

The subject indicates a total alienation from their own history and may recount events as if they were recounting someone else’s experience.

As consequence they may be inappropriately factual, resistant to the line of questioning, claim ignorance or claim lack of memory for their late childhood and adolescence as well

SELF:

OVER-VALUATION

This scale aims to assess unrealistic over-valuation of the self

DESCRIPTION OF SCALE

Over-valuation of the self applies to individuals which may present themselves as stronger, more robust, more central to other people’s concerns, more successful, more powerful than is justified.
Occasionally, these characteristics may be shown in relation to the interviewer, where the subject assumes they are more interesting or important to the interviewer than is likely to be the case (e.g. subjects may feel that they are of special importance in a study, or that their material is of particular interest).

At the extreme end of scale, the subject takes it entirely for granted that he or she is of special importance. It is clear that for the subject, he or she is the only person who really exists or matters.
CODING LEVEL: OVER-VALUATION

MILD

IN THE NARRATIV:
the subject makes a somewhat unnecessary, positive reference to oneself, which strikes the rater as somewhat irrelevant.
A statement of one’s own importance or abilities which may well be true, but are immodest or uncalled for. These references to the self are not counter-balanced by acknowledgement of one’s shortcomings.

Narratives may contain a reference to their central importance within the family and/or other attachment relationships (e.g., interpreting the parents’ behaviour as more centred on the child than is really likely; expecting that the subject’s own children feel and will always feel very close to him or her).

The tendency to attribute other people’s behaviour excessively to concern about oneself.

While there may be occasional references to the value of others, they are often less clearly acknowledged than the reader feels may be appropriate.

IN INTERVIEW:
Conveying that the interviewer probably has a special interest in something the subject is saying - but in quite a plausible way, if the subject is talking about an unusual attachment experience.

MODERATE

IN THE NARRATIV:
Intrusive positive references to oneself, which may have some factual basis but are certainly noticeable or irritating to the rater (e.g., intrusive positive reference in showing a magazine containing an article praising the subject).

The subject’s claim to specialness are unrealistic, and inappropriate to the interview setting – even if there are real achievements, the claims for these are excessive and there are undisguised attempts at self-promotion (e.g., the subject may keep describing experiences in unnecessary detail because he or she believes that they are especially interesting to the interviewer, more significant than things which happen in other people’s lives.).

Self-aggrandisement is coupled with unwarranted criticism of others and the denial of their importance or value to the subject for their development.

There may be mention of other people’s good qualities, but these are also likely to be exaggerated (idealised) and there is an implicit claim that the subject has ownership of the other’s achievements or attributes.

IN INTERVIEW:
Interview questions may be criticised and replaced by the subject’s preferred openings.

The subject may state that he or she is of special importance to the interviewer in a way that is not plausible. 
E.g. He or she may state baldly that the interviewer must want to hear more about his life, or may be dissapointed that the interview is ending.
SEVERE

IN THE NARRATIV:
There are completely unsubstantiated claims to importance, and achievements, and any failures are likely to be contemptuously attributed to others' incompetence or envy.

Others are denigrated or dismissed, but if focussed on in positive terms, are strongly idealised and often seen as creations of the subject. In fact, on occasions, there may be a highly idealised figure, who is held up as an icon.

Undisguised boasting and use of the interview for the purpose of self-promotion.

The subject may describe himself as the only important child in his family, and more valuable than other people in his adult life (not that he was or is treated more favourably, but a sense of automatic entitlement to special treatment).

For example, the subject may state that the death of a sibling did not matter to the parents because he was still there, or that the parents behaved as they did because their only thought was for him and his welfare, all through his childhood, and that this is still their only important concern.

On this level, over-evaluation is the dominant theme in the interview.

IN INTERVIEW:
Condescension towards everybody, including the interviewer. The subject may convey to the interviewer that he or she is lucky to have the chance to talk to him, that his time and comments are immensely valuable.

The interviewer may be put under definite pressure to agree that the subject is special, better than other people or more interesting than the usual interviewee and the subject may become obviously irritated if this confirmation is not given.

Subject constantly forces the interview back to discussion of the self.

The subject frequently volunteers irrelevant information to emphasise his power, influence or importance, aggressively intruding this into the interview when the interviewer tries to bring the subject back to the topic which is being discussed.

The interview questions may be ignored as the subject pursues his or her own self-aggrandisement.

The subject may be irritated by the interviewer's focus on other people. Reference to other people's point of view or needs is resented, or the subject answers any question referring to another person with exclusive reference to himself, and he explains everything in terms of his own importance.
SELF:
UNDER-VALUATION

This scale aims to assess unrealistic under-valuation of the self.

DESCRIPTION OF SCALE

Under-valuation of the self applies to individuals who see little role for the self, or importance of the self in the world or for other people. The subject's account is marked by self-abasement and derogatory remarks in relation to the self and/or the depiction of the self as the victim of aggression. The subject may externalise own feelings or self-worthlessness and may see others as an extension of his/her self-image. As a result he may express paranoid feelings concerning criticism, mocking or hostility, or expressions about personal inadequacy.

Occasionally, these characteristics may be shown in relation to the interviewer, where the subject assumes they are less interesting or important to the interviewer than is likely to be the case (e.g. subjects may feel that the interviewer finds things the subject is saying boring or disappointing.

At the extreme end of scale there is an apparently complete absence of any sense of achievement or positive attributes, and this continually intrudes into the interview. The subject's low sense of self is unremittting and pervasive in the context of all attachment relationships. Subject's feeling of guilt is overwhelming and persecuting, yet seeming in his eyes justified.

The subject may be so convinced of their worthlessness that the interviewer is assumed to be in agreement with the completely bleak picture that is painted. There may be an implicit call for reassurance from the interviewer, and with increasing severity this becomes compelling.

However, if gratified by the interviewer, offering positive feedback of some sort, it leads only to renewed self-denigration

CODING LEVEL: UNDER-VALUATION

MILD

A statement of one's own insignificance or deficiencies seems over-modest.

A description of a negative aspect of the self is not counterbalanced by an acknowledgement of one's strength.

The subject may refer to his or her low importance within the family and/or other attachment relationships. (e.g., describing the parents as rightly underinvolved with the child; expecting that the subject's own children or current attachment figures feel distant from him or her).
Others may be presented as more valuable or important than the reader feels is appropriate, and may be too readily excused for their failures towards the subject.

The subject makes a derogatory remark about himself in relation to others, hereby blaming himself in the narrative.

The language used to describe the self may be unnecessarily condemnatory.

**IN THE INTERVIEW:**
The subject may show some over-sensitivity to the questions or to the interviewer.

The subject makes an unnecessary, negative reference to oneself which strikes the rater as somewhat irrelevant (e.g., conveying that the interviewer probably finds things the subject is saying boring or disappointing).

The interview may show a number of examples of over-sensitivity to the questions or to the interviewer.

**MODERATE**

The subject makes an intrusive negative reference to oneself, which may have some factual basis but are noticeable to the rater (e.g., the subject may keep describing experiences in unnecessary detail because he or she believes that they are clear evidence of limitations or failures; the subject may state that he is particularly uninteresting or a spectacular failure).

The subject depicts himself as victim of others aggression.

There is a suggestion that no efforts of either the subject or anyone else would be likely to help him or her, because of the subject's inadequacies. There may however be a marked sense of shame about these inadequacies, often about having let others down, and a sense of humiliation in the interview.

Incidences of self-harm are hinted at but are not acted out.

**IN THE INTERVIEW:**
The subject claim to unworthiness is unwarranted, and may be inappropriate to the interview setting. (e.g., he may state that the interviewer is wasting her time by talking to him or her). This self-deprecation may be coupled with unwarranted emphasis on the qualities of others.

There are implicit calls for reassurance, either about the narrative or about the subject's performance and compliance in the interview. There might be some pressure on the interviewer to reassure or compliment the subject, but if this is offered then the subject will quickly trump the interviewer's effort to find evidence of something positive.

The subject misinterprets the interviewers comments as mocking or critical.

The interviewer may be seen as being unsympathetic.

**SEVERE**

The subject’s remark indicates that there is an overt preoccupation with the subject's worthlessness, the picture is of no redeeming qualities past or future. (e.g., the subject insists relentlessly that he or she is useless, uninteresting, worthless, and so on. the subject feels that he or she has let everybody down and failed all expectations anybody might have had of him).
Even when there is a more positive aspect about the self presented (and perhaps taken up by the interviewer as a way of offering reassurance), it is immediately turned round so that the whole interview becomes further evidence of the badness and worthlessness of the self.

The subject believes that everyone shares his or her own hyper-critical views.

Self-blame for the aggressive acts of others is frequent with excessive and inappropriate guilt.

There may be explicit wishes to be punished further or to punish themselves, or to die, for imagined misdeeds.

Subject may even report acts of self-harm.

IN THE INTERVIEW:
The subject at this level no longer presses for reassurance, instead there is implied pressure for agreement, the subject does not have a conception that the interviewer might have a different perspective.

The interviewer may be put under definite pressure to agree that the subject is bad, worthless, worse than other people or less interesting than the usual interviewee.

At this level, the self-deprecation is unremitting and is pervasive in the context of all attachment relationships and throughout the interview.

The interviewer is seen as sharing the critical attitude of the attachment figures.
SELF & OBJECT REPRESENTATION:

LACK OF INTEGRATION OF OBJECT REPRESENTATION

Then main feature of these scales is a distortion of an otherwise coherent or consistent object representation in the narrative.

DESCRIPTION OF SCALES

Normally, important figures are represented in complex, multifaceted ways with the subject taking appropriate responsibility for the bi-directional, transactional character of the relationship. A lack of integration of object representation can either be exaggerated and oversimplified [A] or contradicive and incoherent [B] and is therefore coded on two subscales:

[A] EXAGGERATED AND OVERSIMPLIFIED OBJECT REPRESENTATION

and

[B] INCONGRUOUS AND INCOHERENT OBJECT REPRESENTATION

INSTRUCTION FOR CODING

The subject's description may contain one or all the following indicators:

[A] The attachment figure is represented in a way which appears to the reader as an exaggerated and oversimplified aspect of a more complex relationship.

or

[B] The description of the attachment figure is contradictory and the relationship appears rapidly to shift in the interview (prototypically from one extreme to another), without the subject explicitly recognising it.
SELF and OBJECT REPRESENTATIONS:
LACK OF INTEGRATED OBJECT REPRESENTATION

[A] EXAGGERATED AND OVERSIMPLIFIED OBJECT REPRESENTATION

This scale aims to assess a lack of balance and complexity with which past and current attachment figures are represented in the subject’s mind.

DESCRIPTION OF SCALE

The main feature of this scale is a distortion of an otherwise balanced and complex object representation in the narrative. Normally, important figures are represented in complex and multifaceted ways with the subject talking appropriate responsibility for the bi-directional, transactional character of the relationship. When this balanced representation is not present, the description of the attachment figure is exaggerated and oversimplified in either negative or positive terms rather than being complex and multifaceted (splitting).

At the extreme end of the scale, there is a significant split in the representation of the attachment figure who is described in exaggerated and unsupported negative or positive terms.

INSTRUCTION FOR CODING

The attachment figure is represented in a way which appears to the reader/viewer as an exaggerated and oversimplified aspect of a more complex relationship.

CODING LEVEL: EXAGGERATED AND OVERSIMPLIFIED OBJECT REPRESENTATION

MILD

The reader gets the impression that an account of an incident is distorted so that some unrealistic blame or credit is attributed to the other.

MODERATE

Marked exaggeration of a description of a relationship, or of an aspect of a relationship.

Relationships are characterised by a single quality which appears to the reader a very limited and highly selective account.
SEVERE

The attachment figure is seen as having only one overriding characteristic.

All problems within the relationship are blamed on the attachment figure

A highly dysfunctional relationship is described in glowing terms, the attachment figure may be exonerated from any responsibility for difficulties.

SELF and OBJECT REPRESENTATIONS:

LACK OF INTEGRATED OBJECT REPRESENTATION

[B] INCONGRUOUS AND INCOHERENT OBJECT REPRESENTATION

This scale aims to assess a lack of coherence and consistency with which past and current attachment figures are represented in the subject's mind.

DESCRIPTION OF SCALE

Then main feature of this scale is a distortion of an otherwise coherent or consistent object representation in the narrative. Normally, important figures are represented in complex, multifaceted ways, hereby remaining a coherent and homogeneous person.

At the extreme end of the scale, there is a marked oscillation between different characteristics which are extreme, and thus appear confused and confusing.

INSTRUCTION FOR CODING

The description of the attachment figure is contradictory and the relationship appears rapidly to shift in the interview (prototypically from one extreme to another), without the subject explicitly recognizing it.
CODING LEVEL: INCONGRUOUS AND INCOHERENT OBJECT REPRESENTATION

MILD

At some point during the interview, the subject depicts an important relationship in contradictory ways without explicitly recognising this.

MODERATE

Different characterizations of a relationship rapidly follow each other without understandable explanation.

SEVERE

The subject's descriptions are extreme and shifting and appear confused and confusing

The attachment figure is depicted with two or more irreconcilable personalities.

SELF & OBJECT REPRESENTATION:

INAPPROPRIATE AFFECT TONE

The aim of this scale is to provide an overall rating of the inappropriateness of feelings toward important attachment figures.

DESCRIPTION OF SCALE

This scale aims to assess the inappropriateness of affect in relation to the representation of important attachment figures.

Excessive inappropriate negative, positive or flat affect is thought to lead to a distortion of, or detachment from, attachment figures in the mind of the individual.

By contrast, if appropriate positive or negative feelings predominate, this may allow attachments to others to function constructively giving an internal sense of safety. The presence of more benign and balanced affects suggests working through has taken place and an individual is less likely to be overwhelmed by peremptory wishes and desires.

At the extreme end of the scale: insert later

INSTRUCTION FOR CODING:

The rater is instructed to look for discrepancies between the experience and the response of the subject and the type of the affect expected in the circumstance under consideration. The aim is to identify the dominant affect tone emerging from the split.

Moderating Factors:
The rater should consider two classes of possible moderating factors, which lead to an adjustment of the rating by one category in the direction of increased appropriateness. (e.g. from moderate to mild):

a) LISENSING
i.e., interviewee might 'license' the discrepancy between experience and response. Phases such as: "I realise that it must sound funny to you that I still love him, even though he was so cruel to me" or "It is silly for me to be sad" or "I was really angry but I know that she was a very good mother in other circumstances" etc. 'Licensing' the response by acknowledging the discrepancy should lead the rater to adjust the intensity of the response in the direction of increased appropriateness by one level.

b) LEGITIMISATION
Other than the expression of awareness or insight, the subject might moderate the discrepancy by contrasting past experience with the present perception of the event, where only the past perception shows inappropriateness. For example, "When he did not turn up, I did not feel hurt at the time. Now I see it as quite neglectful and I feel quite angry with him". In this example, there was inappropriate lack of affect concerning a minor experience; this is 'legitimised' by the subject's current awareness of the appropriateness of anger in that circumstance. Legitimisation would lead the rater to adjust the experience rating by one category in the direction of increased appropriateness.

Neither legitimisation nor licensing can be considered as increasing the inappropriateness of the response. We assume that in most cases such shifts are part of a process of working through.

CODING LEVEL: INAPPROPRIATE AFFECT TONE

MILD
At this level the affect expressed is not marked, but is either more than you would expect, or is mild, but not in the direction one would expect from the subject matter.

It may be that signs of inappropriate affect tone are in the moderate range, but if the discrepancies are recognised by the interviewee and an attempt is made to deal with them, then this would be rated here.

Mild signs of negative inappropriate affective tone will include, for example, expressions of anxiety, fear, uncertainty, sadness, disappointment, anger, resentment or suspicion of others, which is somewhat inappropriate regarding the described episode.

Mild signs of positive inappropriate affective tone will include, for example, expressions of neutrality and acceptance towards a caregiver who appears to have been neglectful.

MODERATE
At this level affect tone must be inappropriate not only in its quantity but also in its quality. The inappropriate affect is marked but not overwhelming to the subject.

Signs of inappropriate affect tone in the moderate range are not recognised by the interviewee and there is no attempt to deal with them.
Moderate signs of negative inappropriate affective tone will include, for example, expressions of moderate anxiety, fear, uncertainty, sadness, disappointment, anger, resentment or suspicion of others, which is clearly inappropriate regarding the described episode.

Moderate signs of positive inappropriate affective tone will include, for example, expressions of warmth, gratitude, and appreciation towards a caregiver who appears to have been neglectful.

SEVERE

At this level the signs for inappropriate affect tone are extreme in their quantity and quality.

In addition to the extreme expression of inappropriate tone both in quantity and quality, one of the following aspects must be present:
Moderate signs of negative inappropriate affective tone will include, for example, expressions of extreme anxiety, fear, uncertainty, sadness, disappointment, anger, resentment or suspicion of others, which is completely inappropriate regarding the described episode.

Moderate signs of positive inappropriate affective tone will include, for example, expressions of warmth, gratitude, and appreciation towards a caregiver who clearly has been extremely neglectful or even abusive.

In general on this level, affects are more severe (e.g., fear of parent; idealisation) and there is a paradox discrepancy between experiences and affective responses. The individual is likely to be overwhelmed.
SEXUALISATION:

EROTISATION

Extent to which the attachment system has been infused by sexual feelings

DESCRIPTION OF SCALE

Sexual and attachment behaviour - although linked - are fundamentally distinct from each other (Bowlby, 1969, 1982, pp. 230). The activation of the two systems varies independently from each other and is directed towards a different class of objects. As attachment behaviour persists into adulthood, adult (sexual) relationships can be infused by attachment behaviour. E.g. one might treat a sexual partner as though the partner was a parent, and the partner may reciprocate by adopting a parental attitude in return. By contrast, attachment relationships infused with sexual feelings presents a corruption of the domain and a violation of the function of attachment behaviour (incest barrier).

This scale aims to assess sexual ideas and feelings emerging within the attachment context (see Instruction for Coding).

At a moderate level, attachment needs are inevitably associated with sexual feelings.

At the extreme end of the scale attachment relationships were or still are confused with sexual relationships. The attachment need serves a perverted sexual aim.

INSTRUCTION FOR CODING

Indicators of sexualisation of attachment relationships can be found in any relationship with attachment figures:

- relationship with parents and other caregivers (past and present)
- relationship with teachers, minders etc in childhood
- relationship with own children

Please note: Sexualised ('flirtatious') behaviour towards the interviewer is not coded by this scale.

CODING LEVEL: EROTISATION

MILD

At this level, there is an atmosphere of sexuality which is hinted at without clear accounts of sexualised incidents or approaches.
E.g. the subject may describe having felt that her father had a very special relationship with her as his 'little princess', which excluded the mother.

There may be a romanticised, exclusive or vaguely sexual description of the relationship with an attachment figure or child.

The subject describes an atmosphere of sexuality which is hinted at without clear accounts of sexualised incidents or approaches.

The subject may recall events having been inaccurately interpreted as sexual by an attachment figure. (e.g. the teenage girl comes home late, father accuses her of being a whore, about to get pregnant).

MODERATE

On this level, there is some indication that the attachment system has been hijacked to a sexual end. This may be most evident in the narrative account of the parent-child relationship that includes some degree of seduction.

The current relationship with the parent or child may also have a highly inappropriate sexual focus.

On this level there is no clear evidence that sexual abuse concerning an attachment relationship has actually taken place.

However there may be descriptions of sexual abuse outside the context of attachment relationships.

Alternately, the subject might describe incidences outside the context of attachment relationships that have been interpreted as sexual and abusive.

There might be an atmosphere of these relationships being infused with sexual feelings, and of boundaries being blurred.

Examples:
The subject reports that being shown love and affection was conditional on offering physical comforting to the parent, even though this was experienced as sexual by the child. The boy is invited to admire the mother's physical attractiveness (her body shape, her hairstyle or her underwear).

An adult man living with his mother reports the mother insisting on having a contact number whenever he is out with a woman, ringing him and insisting on knowing where he is and what he is doing.

SEVERE

On this level there may be either clear indication that sexual abuse has taken place within the context of an attachment relationship.

There may be descriptions of repeated, actual parental sexual abuse towards the child, so that the whole atmosphere of the family and of subsequent attachment relationships is infused with sexual feelings, and boundaries are blurred.
Attachment behaviour such as protectiveness or the wish to be close to another person are consistently described in overtly sexual terms. (e.g. expressions of affection from either parent are remembered by the subject as sexual invitations, and there is no expectation of intimacy being possible without erotic expression).

Boundaries of sexuality itself becoming blurred and thus perverted (producing any variety of perverse sexuality, e.g. sadistic, fetishistic, etc or children and adults being seen as interchangeable partners).
Appendix III

Ethics Documentation
RESEARCH PARTICIPANT CONSENT FORM

RESEARCH STUDY:  
"Memories of Childhood and Personality Functioning"

Please take your time and read the Participant Information Sheet carefully. Please tick the boxes prior to signing this form.

I have been explained to the project orally □

I had the opportunity to ask questions and to discuss the study □

I have read the participant information sheet □

I did receive enough information □

I do understand that I am free to withdraw from the study at any stage and that a withdrawal will not have any effect on the support or care you receive from any services □

I do agree to be videotaped for the purpose of this study □

I do agree with the publication of the results of the study in an appropriate outlets □

I do understand that my personal details will not be identifiable and that data will be protected according to the Data Protection Act □

I understand that all files and recordings will be kept securely by Parkside Clinic and University College London □

Date..................................  
Signature................................

I have explained the interview and recording procedure to the participant and confirm that they have given consent. I have explained that, if they prefer not to give such a consent, the Trust will still endeavour to provide them with the highest quality service.

Signed by researcher..............................................
St Mary's Research Ethics Committee
Internal Mail Box 121
St Marys Hospital
Paddington
London
W2 1NY

January 2006

Ms. Anuschka Buettner
Senior Psychotherapist
University College London
Villa Gardens
London W11 2BA

Ms Buettner

Title of study: The relationship between current personality functioning and memories of early attachment relationships
Reference number: 05/Q043/134

Thank you for your letter of 19 January 2006, responding to the Committee's request for further information on the above research and submitting revised documentation.

Further information was considered at the meeting of the Sub-Committee of the REC on 26 January 2006. A list of the members who were present at the meeting is attached.

Confirmation of ethical opinion
On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Ethical review of research sites
The favourable opinion applies to the research sites listed on the attached form.

Conditions of approval
The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents
The final list of documents reviewed and approved by the Committee is as follows:

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>5.0</td>
<td>08 September 2005</td>
</tr>
<tr>
<td>Invitation</td>
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<td></td>
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<tr>
<td>Investigator CV</td>
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<tr>
<td>Protocol</td>
<td>1</td>
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<tr>
<td>Letter from Sponsor</td>
<td>n/a</td>
<td>08 September 2005</td>
</tr>
<tr>
<td>Protocol Schedules/Topic Guides</td>
<td>n/a</td>
<td>08 September 2005</td>
</tr>
<tr>
<td>Recruitment</td>
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<td>08 September 2005</td>
</tr>
<tr>
<td>Letter of invitation to participant</td>
<td>1</td>
<td>08 September 2005</td>
</tr>
</tbody>
</table>

An advisory committee to North West London Strategic Health Authority
Research governance approval

The study should not commence at any NHS site until the local Principal Investigator has obtained final research governance approval from the R&D Department for the relevant NHS care organisation.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

Attachments: Standard approval conditions

Site approval form

To:

Dr Bernard Roberts
Parkside Clinic
63 Lancaster Road
London
W11 1QG
[R&D Department for NHS care organisation at lead site]
Dear Ms Buettner

Re: Trust Research Application Number: BA 06 24

I am writing to you as the named Chief Investigator on this study although my contact has been with Tanya Lee. Unfortunately this Trust’s R&D Committee meeting on the 9 November had to be cancelled and this has caused a delay in coming back to you with the result of the review. I am pleased to advise you that your application has been approved. As I am sure you are aware the Trust now has to meet rigorous standards set by the Department of Health for research governance. Consequently, your research must be carried out subject to the following conditions:

- Permission to proceed is granted by a Research Ethics Committee and I understand that a favourable ethical opinion has already been granted and that Tanya will be sending me a copy of this.

- Honorary contracts are in place. I understand that Tanya is expecting to receive an honorary contract with this Trust and that she will send to me a copy of this.

- This Trust’s logo must be correct on any documentation e.g. the participant information sheet and consent form and amendments to the submitted documents are required. I will send this Trust’s logo to Tanya Lee. Please send online copies of the amended documents.

- A ‘Brief Information Sheet for Participants’ was submitted together with the main participant information sheet and the former refers to interviews taking place at Parkside Clinic and clearly is incorrect. My understanding is that the interviews will take place either at Epping Forest Day unit, Latton Bush CMHT, the Derwent Centre or Loughton CMHT. Accordingly this should be altered in the brief information sheet although it is not clear why it is necessary to have this document at all. Please send online copies of the amended document.

Cont.......
The research must be carried out in strict accordance with the protocol submitted and any changes to that protocol must be approved by the R&D Committee and receive a favourable ethics opinion from a Research Ethics Committee before the research is undertaken or continues.

A financial or any other agreement relating to your research that is binding upon the Trust must be notified to me and thereafter approved and signed by the Chief Executive of the Trust.

You must report any adverse events relating to this research to me as soon as practicable. I can be contacted by telephone on 01245 546434. In my absence, incidents should be reported to the Medical Director, Dr Malte Flechtner who can be contacted by telephone via his PA on 01245 546418. In addition, you must complete one of the Trust's adverse incident forms and follow the requirements as set out in the Trust's adverse incident reporting policy. A copy of the adverse incident form must be submitted to me as soon as possible.

In cases where the research will take place over a period of more than 12 months, you are required to send to me a short progress report on your research dealing with recruitment, any adverse incidents and interim findings as appropriate. You will be notified when the report is due.

Any research terminated prematurely must be notified to me immediately.

The results of your completed study must be sent to me within 3 months of completion of the study so that the Research and Development Committee can consider it. In addition, please supply a summary on a single page of A4 paper of the conclusions of the study that would be suitable for dissemination.

The R&D Committee, on behalf of the Trust, will revoke or suspend its approval to any research that does not comply with these conditions, is in breach of LREC approval or where there is any misconduct or fraud.

I wish you every success with your research and to receiving a copy of the ethics committee approval, copy of Tanya Lee's honorary contract with the Trust and amended documents in due course.

Yours sincerely

Sarah Thurlow
Research and Development Manager
With Essex Mental Health Partnership NHS Trust
08 May 2007

Ms Anouschka Buettner
28A Powis Terrace
London
W11 1JH

Dear Ms Buettner

Full title of study: The relationship between current personality functioning and memories of early attachment relationships

REC reference number: 05/Q0403/134

The REC gave a favourable ethical opinion to this study on 26 January 2006.

Further notification(s) have been received from local site assessor(s) following site-specific assessment. On behalf of the Committee, I am pleased to confirm the extension of the favourable opinion to the new site(s). I attach an updated version of the site approval form, listing all sites with a favourable ethical opinion to conduct the research.

R&D approval

The Chief Investigator or sponsor should inform the local Principal Investigator at each site of the favourable opinion by sending a copy of this letter and the attached form. The research should not commence at any NHS site until approval from the R&D office for the relevant NHS care organisation has been confirmed.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

05/Q0403/134 Please quote this number on all correspondence

Yours sincerely

Enclosure: Site approval form
Cc Tanya Lee: 42 Whittlesford Road, Newton, Cambridge CB 22 7PH
| Date of REC | 08/05/2007 |
| Notes | 20/01/2006 |
Participant Information Sheet
Memories of Childhood and Personality Functioning

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss with others if you wish. If anything is not clear, or if you would like more information, please ask the researcher. Thank you for taking the time to read this!

What is the study about?
This study is looking at the way people remember their childhood experiences, in particular their early relationships with their parents. We would like to understand, how memories of childhood experiences and relationships are related to current personality functioning. The research will take around a year to complete in total, although each individual participant will only be asked to attend one interview session.

Why have I been chosen?
We would like to interview you as part of a group that will be compared to a similar group of NHS patients, referred for mental health problems. Therefore we contacted GPs to pass on information about this study to anyone who might be interested in participating. In total we hope to interview around 30 people.

Do I have to take part?
It is entirely up to you whether or not to take part. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time, without giving a reason.
What will happen if I take part?
If you decide to take part, you will be offered a time to meet with a researcher who will interview you. The interviews will take place in a room in the Psychology Department, University College London.

The interview is likely to take between 2 and 3 hours to complete, and consists of two parts: an interview about your current personal and social life, lasting about 30 to 60 minutes to an hour and an interview about your early childhood memories, lasting between 60 to 90 minutes. There will be a break of at least 15 min following the first interview. Before completing the interview, you will be also given a chance to ask any questions about the research, and you will be asked whether you agree to take part and to sign a form of consent.

The interview will be completed by a Trainee Clinical Psychologist.

Both interviews will be videotaped, so that researcher can look at them later and write out transcripts of them. We decided to use videotape as opposed to interview protocols, as we wanted to make sure that we are getting a complete and realistic picture.

As we appreciate your participation, we are able to offer you £ 15.00 to reimburse your time and travel expenses.

What are the possible disadvantages and risks of taking part?
Taking part in this research will involve interviews, which covers topics that some people might find difficult to discuss. If you decide to take part, but find the interview upsetting, you are free to answer the relevant question or to change your mind and stop at any time. If as a result of the interview, you feel you need some support to come to terms with some of the things you have discussed, the interviewer will help to arrange this.

What are the possible benefits of taking part?
The information we get from the study may help to understand how memories of early childhood relationships and experiences are related to the personal functioning and social relationships in later life. We hope that a better understanding will help us to provide a more better support for people with difficulties in these areas of their life. Some people have found that the interviews are interesting or even beneficial for them.

What if something goes wrong?
If you wish to complain or have any concerns about any aspect of the way you have been approached or treated during the course of this study, you can discuss this with the research supervisor, whose contact details are given below.

What will happen to any information about me?
All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you - any forms, videotapes or transcripts - will have your name or any personal details removed at the earliest stage so you cannot be identified from them. All data will be stored in accordance with Data Protection Act, and only accessible to the researcher immediately involved in this study.

All material will be disposed of securely once the research has been completed, according to UCL retention schedules and appraisal guidelines.
Before disposal, the videotapes will be electronically cleared and cleaned. This will be recorded in a Video Tape Log, noting the date and time of the disposal.

Nobody will be informed that you have taken part unless you ask the researcher to do this.

**What will happen to the results of the research study?**
The results of this research will be written up as part of the researcher's Doctorate in Clinical Psychology. They are also likely to be written up for publication in scientific journals. If you would like to be sent a summary of the results, or a copy of any papers that are published as a result of this study, please let the researcher know this and it will be arranged. All results will be made anonymous when they are written up - it will not be possible for anyone reading the research to identify you.

**Further Information**
If you would like any further information about the study, or discuss any questions or concerns, or decide to take part in the research, please contact one of the two researchers:

**Researchers:**
*Tanya Lee and Joanna Pearson*
Trainees in Clinical Psychology

*Anouschka Buettner*
PhD researcher

**Scientific Supervisor:**
*Dr. Mary Target, Senior Lecturer*
Sub-department of Clinical Health Psychology
University College London
Gower Street
London
WC1E 6BT

Thank you for taking the time to read this information. If you decide to take part, you will be given copies of the consent form to keep.

This study has been approved by St.Mary's Research Ethics Committee - Ref.No: 05/Q0403/134
Participant Information Sheet:

Memories of Childhood and Personality Functioning

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss with others if you wish. If anything is not clear, or if you would like more information, please ask the researcher (see contact details below). Thank you for taking the time to read this!

What is the study about?
This study is looking at the way people remember their childhood experiences, in particular their early relationships with their parents. We would like to understand how memories of childhood experiences and relationships are related to current personality functioning. The research will take around a year to complete in total, although each individual participant will only be asked to attend one interview session.

Why have I been chosen?
We would like to interview people who have been referred to Parkside as they are currently experiencing difficulties in their personal and social life. Therefore we asked the psychotherapist conducting your assessment to pass on information about the study to anyone who thought they might like to take part. In total we hope to interview around 30 people for this study.

Do I have to take part?
It is entirely up to you whether or not to take part. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time, without giving a reason.
A decision to withdraw, or a decision to take part, will not have any effect on the support or care you receive from any service.

**What will happen if I take part?**
If you decide to take part, you will be offered a time to meet with a researcher who will conduct the interviews. The interviews will take place in a room at Parkside Clinic.

The interview is likely to take between 2 and 3 hours to complete, and consists of two parts: an interview about your current personal and social life, lasting about 30 to 60 minutes to an hour and an interview about your early childhood memories, lasting between 60 to 90 minutes. There will be a break of about 15min in between the two interviews. Before completing the interview, you will be also given a chance to ask any questions about the research, and you will be asked whether you agree to take part and to sign a form of consent. The interview will be completed by an Honorary Psychotherapist of Parkside Clinic.

Both interviews will be videotaped, so that researcher can look at them later and write out transcripts of them. We decided to use videotape as opposed to interview protocols, as we wanted to make sure that we are getting a complete and realistic picture. The videotapes will have your name or any personal details removed at the earliest stage so you cannot be identified from them. The videotapes will be stored in accordance with the Data Protection Act, and will be disposed of securely once the research has been completed. The videotaped interviews will not be used for commercial purposes.

As we appreciate your participation, we are able to offer you £ 15.00 to reimburse your time and travel expenses.

**What are the possible disadvantages and risks of taking part?**
Taking part in this research will involve interviews, which covers topics that some people might find difficult to discuss. If you decide to take part, but find the interview upsetting, you are free to answer the relevant question or to change your mind and stop at any time. If as a result of the interview, you feel you need some support to come to terms with some of the things you have discussed, the interviewer will help to arrange this.

**What are the possible benefits of taking part?**
The information we get from the study may help to understand how memories of early childhood relationships and experiences are related to the personal functioning and social relationships in later life. We hope that a better understanding will help us to provide a more better support for people with difficulties in these areas of their life. Some people have found that the interviews are interesting or even beneficial for them.

**What if something goes wrong?**
If you wish to complain or have any concerns about any aspect of the way you have been approached or treated during the course of this study, you should discuss this with the researcher or the clinical supervisor, whose contact details are given below.
What will happen to any information about me?
All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you - any forms, videotapes or transcripts - will have your name or any personal details removed at the earliest stage so you cannot be recognised from them. All data will be stored in accordance with Data Protection Act, and will be disposed of securely once the research has been completed. Nobody will be informed that you have taken part unless you ask the researcher to do this.
The only exception to this confidentiality will be if you tell the interviewer anything that causes serious concern about harm to you or another person. If this happens it will be necessary for the researcher to discuss this with the clinical supervisor, to ensure your safety.

What will happen to the results of the research study?
The results of this research will be written up as part of the researcher's PhD theses in Psychology.
They are also likely to be written up for publication in scientific journals. If you would like to be sent a summary of the results, or a copy of any papers that are published as a result of this study, please let the researcher know this and it will be arranged.
All results will be made anonymous when they are written up - it will not be possible for anyone reading the research to identify you.

Further Information
If you would like any further information about the study, or discuss any questions or concerns, or decided that you would like to take part in this study, please contact the researcher:

Researcher:
Anouschka Buettner
Honorary Psychotherapist / PhD researcher

Clinical Supervisor:
Dr Bernard Roberts
Senior Consultant in Psychotherapy

Both can be contacted at:
Parkside Clinic
63 Lancaster Road
London W11 1QG

Thank you for taking the time to read this information. If you decide to take part, you will be given copies of the consent form to keep.

This study has been approved by St.Mary's Research Ethics Committee - Ref No: 05/Q0403/134
Example of the short form participant information sheet given to clinical participants at interview

North Essex Mental Health Trust

Brief Information Sheet for Participants

Memories of Childhood and Personality Functioning

What is the study about and why have I been asked?
In brief, the aim of the study is to gain a better understanding of how current personality functioning is related to the way people remember their early childhood experiences. Therefore, we would like to interview people who are currently experiencing difficulties in their personal and social life.

What does it involve for me?
You will be asked to meet with a researcher for a one-off interview, which will take place at Parkside. The interview will consist of two parts, a brief questionnaire and two video-taped interviews. These interviews can last between 60 to 90 minutes. The will be a break in between them.

For your time and travel expenses we are able to offer you a reimbursement of £15.00.

The study we ask you to participate in is independent from the assessment procedure or any service provided by Parkside Clinic. A decision to take part or not to take part, will not have any effect on the support or care you receive from any service.

What will happen to any information about me?
All information about you will be kept strictly confidential. All data will be stored in accordance with Data Protection Act, and is only accessible to the researcher immediately involved in the study.

If you have further questions that are not addressed or sufficiently answered by the attached information sheet, or would like to generally talk to us about the study, you can contact us either by email or at Parkside Clinic and we will get in touch with you.

We thank you for your time to read through this information and are looking forward to hear from you!
CONTACT: Tanya Lee, Researcher
PHONE:

This study has been approved by St. Mary's Research Ethics Committee 05/Q0403/134
(patient's address)

London, (date)

Dear (patient's name),

I would like to inform you about a research project that is currently conducted at Parkside Clinic/The Waterview Centre/ Epping Forest Day Unit/ Latton Bush CMHT/ (delete as appropriate) in conjunction with University College London.

I was wondering if you would be interested in participating in the project.

Please find enclosed a brief description of what the study is about and, more importantly, what your participation involves for you.

If you would like further information or would like to discuss any questions, please feel free to contact me at any time either by phone or by email (see contact details below).

Alternately, you can use the enclosed feedback form and envelope.

Yours sincerely,

Tanya Lee
Participants wanted!

We are looking for people prepared to talk about their childhood experiences and how these may relate to your current life.

This will involve a one-off interview and questionnaire for which you will be re-reimbursed £15 for your time and travel expenses.

Participants need to be between 18 and 65 years old.

For more information
Please contact
Appendix IV:

Examples of Coding sheet and scoring sheets
## Example of coding sheet format

<table>
<thead>
<tr>
<th>TIME</th>
<th>DIMENS</th>
<th>SCALE</th>
<th>LEVEL</th>
<th>SCALE DESCRIPTION</th>
<th>INTERVIEW DESCRIPTION</th>
<th>Non verbal behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Self under</td>
<td>mild</td>
<td></td>
<td>A statement of one's own deficiencies seems over-modest.</td>
<td>'the earliest I can remember is 7, I am a bit behind.'</td>
<td>Shy laugh, looks down</td>
</tr>
<tr>
<td>10.30</td>
<td>Non-attachment??</td>
<td>mild</td>
<td></td>
<td>Episodes of contact with the attachment figure are described with some elaboration but in bland terms. There may be recourse to clichés or stereotyped descriptions of activities.</td>
<td>Subject uses adjective of loving and talks about mothers housewife duties to illustrate it e.g. cooking, cleaning, taking to school.</td>
<td>smiling</td>
</tr>
<tr>
<td>13.30</td>
<td>Ext agg??</td>
<td>mild</td>
<td></td>
<td>The subject might show mild annoyance on this level.</td>
<td>'this is gonna take longer than an hour...'</td>
<td>Smiles and laughs</td>
</tr>
<tr>
<td></td>
<td>exaggerated</td>
<td>mild</td>
<td></td>
<td>The reader gets the impression that an account of an incident is distorted so that some unrealistic blame or credit is attributed to the other.</td>
<td>Lack of specific memories for mum (only one very specific memory given, the rest general). All adjectives positive and quite similar e.g. loving, caring, understanding.</td>
<td></td>
</tr>
<tr>
<td>22.30</td>
<td>Down reg</td>
<td>mild</td>
<td></td>
<td>Mild denial of the impact of events.</td>
<td>'he never said that he loved me, but then he never suggested that he didn't...so he was loving in that way'</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Down reg</td>
<td>mild</td>
<td></td>
<td>Affect is muted and flat. Responses are reduced.</td>
<td>Description of the attack and the illness and of going into hospital, described in emotionally flat terms, no account of own emotional reactions to event</td>
<td>Playing with hands on the table, stretching out fingers, rubbing table. Neutral face.</td>
</tr>
</tbody>
</table>
### Example of scoring sheet format

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>SCALES &amp; SUB-SCALES</th>
<th>COMMENTS</th>
<th>SCORES</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFFECT</td>
<td>DOWN</td>
<td>in relation to father's death whereas other evidence indicates it had a big impact on her</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>UP</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>LABILITY</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>AGGRESSION</td>
<td>EXTERNAL</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PASSIVE</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>COGNITION</td>
<td>DISTURBANCE OF THINKING</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>RELATEDNESS</td>
<td>ANXIOUS DEPENDENCY</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>HOSTILE GRIEVANCE</td>
<td>relationship with mother- although main acknowledges past complaints she no longer holds</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>[A] LACK OF ATTACHMENT</td>
<td>no relationship with father (but due to death) luke warm relationship with mother</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>[B] OVER-EXTENDED ATTACHMENT</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SELF</td>
<td>OVER-EVALUATION</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>SELF &amp; OBJECT</strong></td>
<td><strong>UNDER-EVALUATION</strong></td>
<td>self-harm plus implies low importance in the family</td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------</td>
<td>---------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td><strong>LACK OF INTEGRATION [A] EXAGGERATED</strong></td>
<td></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>LACK OF INTEGRATION [B] INCOHERENT</strong></td>
<td></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td><strong>SEXUALISATION</strong></td>
<td><strong>EROTISATION</strong></td>
<td>with older brother</td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>
Appendix V

Testing the normality assumptions of the scales
Testing normality assumption for independent samples t-tests

Distribution graphs for each of the scales

**down regulation**

![Histogram for down regulation]

- Std. Dev = 1.99
- Mean = 4.4
- N = 54.00

**up regulation**

![Histogram for up regulation]

- Std. Dev = 1.98
- Mean = 2.6
- N = 54.00
oscillation

lack of concern

oscillation

lack of concern
Appendix VI

Example sheets from the content analysis
<table>
<thead>
<tr>
<th>INTERVIEW DESCRIPTION</th>
<th>PARA_LINGUISTIC</th>
<th>FACIAL EXPRESSION</th>
<th>VOICE TONE</th>
<th>POSTURE</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>recalling happy memories of grandmother</td>
<td></td>
<td>smiling</td>
<td></td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>other traumatic experiences-no apart from the times that I thought my mother was home to stay and then she disappeared like a puff of some ash though she had never been there</td>
<td>clicks fingers to illustrate mother disappearing</td>
<td></td>
<td></td>
<td></td>
<td>animation</td>
</tr>
<tr>
<td>apologising for not understanding the question</td>
<td></td>
<td>sits back in chair and waves hands in appeasing way</td>
<td></td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>I get on very well with guys and girls my own age but there is no way I could consider a relationship. I did have a relationship with a woman when I was younger- but to have a boyfriend I can't... (shakes head)</td>
<td></td>
<td>emphasises on 'no way'</td>
<td></td>
<td></td>
<td>animation</td>
</tr>
<tr>
<td>I'd like you to describe your relationship with you parents as a young child</td>
<td></td>
<td>pulls a painful face- wincing</td>
<td></td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>what else would you like to know?</td>
<td>laughs dismissively</td>
<td>patronising voice tone</td>
<td></td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>imitates mother's shouting voice (&quot;what are your legs going to look like when you are older?&quot;) then bursts out laughing</td>
<td></td>
<td></td>
<td>imitating someone else's voice - play acting</td>
<td></td>
<td>animation</td>
</tr>
<tr>
<td>while talking about having scraped her knee in childhood, says in a mocking way: &quot;fear for your</td>
<td></td>
<td>play-acting, joking</td>
<td></td>
<td></td>
<td>animation</td>
</tr>
<tr>
<td>children in primary school</td>
<td>throughout interview subject displays interesting NV behaviour in relation to interviewer/camera</td>
<td>very little eye contact, often looks away, or suddenly down in a very bizarre way; also talks in a very peculiar, chopped up way</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>talks about how this was her first funeral, then stops herself for a few seconds, looking straight, no facial movement, then continues talking about how it was an unpleasant experience</td>
<td>emphasis on everything and everyone</td>
<td>appears to be trying to deal with feelings, regulating affect</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was always anxious and worried about everything and everyone</td>
<td>emphasis on word 'so'</td>
<td>animation</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I remember pleading with her not to go (from hospital) and she just walked out...I can remember being so frightened</td>
<td>waves hands towards face to indicate things coming at her</td>
<td>animation</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was really looking for a mother, at that stage I really was, and I just had this flying at me all the time; talking about mum beating her as a child</td>
<td>animated and miming hitting someone with a bar</td>
<td>? External aggression</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>talking about mum being hit by boyfriend with a metal bar</td>
<td>emphasis on word 'battered'</td>
<td>angry</td>
<td>animation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking about how she perceives the interviewer to be 'afraid for her' because she is becoming agitated in the interview</td>
<td>laughs</td>
<td>embarrassed</td>
<td>puts hand to mouth</td>
<td>self/under-indication of paranoia in the interview</td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>my dad spent so much time trying to get me to be independent, but when it came to that time (leaving to go to uni) they didn't want me to leave</td>
<td>smiles</td>
<td></td>
<td></td>
<td>anxious dep</td>
<td></td>
</tr>
<tr>
<td>that continued until fairly recently when I was like, come on I'm sick but I'll get over it. The way your parents treat you though, it gets in your head</td>
<td>slightly sarcastic voice tone</td>
<td></td>
<td></td>
<td>anxious dep/external aggression</td>
<td></td>
</tr>
<tr>
<td>goes on to talk about how her mum was raped several times by men coming to the house</td>
<td>voice change to formal when she talks about the rapes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>talking about living with mum and being brought dresses-goes on to talk about imaginary friend</td>
<td>I was little mummy smiling</td>
<td></td>
<td></td>
<td>Cognition</td>
<td></td>
</tr>
<tr>
<td>talks about mum giving birth in a car and how they were given bravery awards</td>
<td>narrative-story teller big smile</td>
<td>excited and animated with hands</td>
<td>cognition/animation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>talking about being frightened and worried about men when she was five because 'they are too tactile'</td>
<td>changes tenses without noticing it so she sounds as though she is describing a current situation</td>
<td>looks sad child-like looks down</td>
<td></td>
<td>Cognition</td>
<td></td>
</tr>
</tbody>
</table>
**my mother for herself...she actually has two sets of rules for herself there's no real system. For everyday routines she has her routine and that's the way it's done. If you take her out of her routine she's totally lost and there's chaos. I think she's trying to keep you in a specific role to keep her safe. But I'm totally different, you can put me on the other end of the spectrum...this is the first time I've come to London but I'm not lost, I'm very good at finding my way around things.**

<table>
<thead>
<tr>
<th>Thought mummy was always jealous of my boyfriends</th>
<th>childish language</th>
<th>child-like</th>
<th>cognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talks in a lot of detail about father's office a work and what was in it</td>
<td>slip- past to future tense</td>
<td>fast excited speech</td>
<td>cognition</td>
</tr>
<tr>
<td>I know now that it was children and I know now that they are not, I know now that they were children but it don't make it any better because its too ingrained</td>
<td>coughs and voice tone changes- becomes deeper and louder</td>
<td>cognition-dissociation?</td>
<td></td>
</tr>
<tr>
<td>when I was about 3 years old my dad brought a house in manor park, and all I remember of it was running around and it was just so big, and there were so many rooms. I didn't think we were going to live there, I just thought we were there. I was running around and turns out it wasn't a big house it was quite a small house. Just a two bedroom house, so that wasn't much space for the 7 of us</td>
<td>hesitant, anxious, looking down, playing with hands</td>
<td>cognition. Child-like behaviour and posture-self-soothing?</td>
<td></td>
</tr>
<tr>
<td>as he was literally on his death bed (grandfather) he said to my dad, he's got to grow up and start looking after the farm and the pigs and the chickens they call it the garden, but its achers...explains that this is why his dad never had an education</td>
<td>fiddling with watchstrap</td>
<td>cognition. Self-soothing?</td>
<td></td>
</tr>
<tr>
<td>continues to talk about moving house unexpectedly</td>
<td>voice sounds younger/child-like</td>
<td>cognition/Child-like</td>
<td></td>
</tr>
<tr>
<td>if we were in the kitchen and we didn't eat the dinner mummy had cooked for us, she'd throw it at us. So I hated her for that</td>
<td>childish language</td>
<td>child-like</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I saw it, it was something that I saw in my life. I had two bags, one would be that type of bag and another type of bag and two pairs of pants. I would always buy two pairs of things and I looked at them and swapped them around. I just didn't want two, I don't know why I wanted one</td>
<td>laughs</td>
<td>picks up bag</td>
<td>cognition/confused/bizarre</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>I remember being on my own in the garage when I was about 4 and feeling a presence...excuse me, sorry, I'll have to tell myself though</td>
<td>starts coughing again</td>
<td>Looks down and says 'I'll have to tell myself though' (talking to self?)</td>
<td>cognition/confused/bizarre-hallucinatory??</td>
</tr>
<tr>
<td>It does matter when you want to have a child...I don't know too much I just sense it, but I do know that when I pick these up there is a part of you that is reading it and understanding it a certain way and I worry about just doing that my childhood experiences my effect my child-interviewer. I'm not following' goes on to explain that she doesn't want to repeat past mistakes-subconscious patterns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>picks up glasses</td>
<td>cognition/confused/bizarre</td>
</tr>
</tbody>
</table>
one day I thought, I've had enough. I've told teachers, I've told parents, I've even got into some crime thinking that the groups...for a while I tried talking with a west Indian accent, goes on to say that that didn't make any difference, but that made me look more black for when the white kids wanted to pick on me.

and one day I don't know what happened I thought I've had enough of this, and I'd lent this guy a record and he hadn't brought it back, and he'd had it for weeks...and every time I asked him they all stop up there laughing at me...and one day he gave it back to me and I wished he hadn't because it was so scratched it looked like he had put it on the tarmack...

and I don't know I just snapped (matter of fact)...I went home, I felt like I just needed something to eat, I came back I walked up behind him, and I just didn't stop beating him

<table>
<thead>
<tr>
<th>louder deeper voice tone</th>
<th>stops fidgeting, looking up (recounting?)</th>
<th>cognition/dissociation</th>
</tr>
</thead>
<tbody>
<tr>
<td>voice sounds 'dreamy' reminiscent.</td>
<td></td>
<td>cognition/dissociation</td>
</tr>
<tr>
<td>despair/shame</td>
<td></td>
<td>cognition/dissociation</td>
</tr>
</tbody>
</table>
and then it was almost daily, especially the ones that done it in the past, its like I had a mental note of all of them and I just went after all of them really. I waited until they said something. I didn't just hit them, I always let them think that I'm not going to and then I'd start...even using bits of wood. I'm not saying that I'm proud of it but I did get left alone then.

<table>
<thead>
<tr>
<th>change of tense briefly</th>
<th>shame</th>
</tr>
</thead>
</table>

| detached 'spooky' voice again when saying 'and it was almost daily then' then voice tone changes back to normal tone again quickly. | looking down |

| sudden dampening of affect- looks down and goes quiet as though thinking about something. When she begins to talk again it is to recall an incident-different topic-goes on to talk about being sat at the dining room table for a whole holiday because she didn't do well in a maths test |

| cognition/dissociation |

<table>
<thead>
<tr>
<th>and mummy committed suicide</th>
<th>childish language</th>
</tr>
</thead>
</table>

| matter of fact | cognition/down-reg |
I was working in Cholchester at the time and my brother phoned up and said mummy's dead, and nobody believed me that I said on the phone, Paul she'd committed suicide. And when they had done what they had to do, because they accused my stepfather of murdering her. She saved all her sleeping tablets up and she'd killed herself, thats what she'd done- goes on to talk about funeral

<table>
<thead>
<tr>
<th>childish language</th>
<th>matter of fact</th>
<th>cognition/ down-reg</th>
</tr>
</thead>
</table>

I should have stayed away and when I did stay away she died

<table>
<thead>
<tr>
<th>tuts</th>
<th>looks up</th>
<th>cognition/ perseverance</th>
</tr>
</thead>
</table>

childhood experiences affected adult personality? I think in a way its all turned out bad. Not because of them but by me trying not to do what they did that upsetted me, I've spoiled my familiiy's life because I've tried too hard

<table>
<thead>
<tr>
<th>childish words 'upsetted'</th>
<th>child-like</th>
<th>cognition/ self-under</th>
</tr>
</thead>
</table>

other experiences you would describe as traumatic? Yes loads, but for some reason I can't remember any of them

<table>
<thead>
<tr>
<th>looks absent-momentary change of facial expression-loss of previous expression</th>
<th>looking down</th>
<th>cognition? Mild dissociation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I didn't know much about sex even when I was grown up. A few weeks later or a month my mother decided I was pregnant so I went to the surgery to have a test done and I was pregnant. (18/19)- goes on to talk about abortion.</td>
<td>laughs</td>
<td>up-beat</td>
</tr>
<tr>
<td>talking about domestic violence in her community</td>
<td>childish expressions all the mummies and daddies had fights and all of the mummies and daddies were domestically beaten up</td>
<td>pouting-childlike</td>
</tr>
<tr>
<td>talking about how grandmother brought her a pet monkey when she was 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>memories of grandmother and how everyone loved her. goes on to recall the day she died</td>
<td></td>
<td>child-like</td>
</tr>
<tr>
<td>talking about adjective 'loving' for mum</td>
<td>she was the safest and lovingest mum</td>
<td>pouting-childlike</td>
</tr>
<tr>
<td>talking about how mum's ex-boyfriend is now doing a life sentence for rape and murder</td>
<td></td>
<td>voice change to formal when she mentions life sentence</td>
</tr>
<tr>
<td>talking about being taken to see grandmother in her coffin</td>
<td>I kissed my nanny- mum said she's smiling at you, I said oh yer</td>
<td>smiling</td>
</tr>
<tr>
<td>laughing whilst talking about how friend's death made her think about the after life</td>
<td>laughs a little</td>
<td></td>
</tr>
<tr>
<td>Event</td>
<td>Description</td>
<td>Emotion</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Recalling incident of phoning the police because she didn't want</td>
<td>Flat/matter of fact</td>
<td>neutral</td>
</tr>
<tr>
<td>to stay at her dad's and being taken in to care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking about incident where she told her mum she was leaving and</td>
<td>Laughs</td>
<td></td>
</tr>
<tr>
<td>went and sat out on the steps until she fell asleep - 'my mum was</td>
<td></td>
<td></td>
</tr>
<tr>
<td>winding me up leaving me out there</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What would you do when you were upset as a child? Bang my head on the</td>
<td>Flat/matter of fact</td>
<td></td>
</tr>
<tr>
<td>wall, pull out my hair, bite myself. That was my self harm as a child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think</td>
<td></td>
<td></td>
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<tr>
<td>I used to howl and cry myself to sleep with rage-no one ever</td>
<td>Flat/matter of fact</td>
<td></td>
</tr>
<tr>
<td>addressed it - they'd say, ah, she'll get tired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does this effect you as an adult? Not really, only when my sister's</td>
<td>Flat/matter of fact</td>
<td></td>
</tr>
<tr>
<td>father sexually touched me and I had to go to the doctors to get</td>
<td></td>
<td></td>
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<tr>
<td>checked</td>
<td></td>
<td></td>
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<tr>
<td>Talking about being raped and going to confront her rapist at a later</td>
<td>Flat/matter of fact</td>
<td></td>
</tr>
<tr>
<td>time and how he killed his girlfriend by putting a knife through her</td>
<td></td>
<td></td>
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<tr>
<td>head (death of girlfriend given different explanation later in the</td>
<td></td>
<td></td>
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<tr>
<td>interview)</td>
<td></td>
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<tr>
<td>talks about how she trapped her finger and her uncle used his teeth to rip the half cut-off finger off. The doctors told him that they could have used that skin to sew it back on</td>
<td>laughing</td>
<td>neutral</td>
</tr>
<tr>
<td>talking about being made to read in front of the class when she had a stutter and how she would be petrified in anticipation</td>
<td>neutral</td>
<td>neutral</td>
</tr>
<tr>
<td>talking about father hitting mother</td>
<td>neutral</td>
<td>matter of fact</td>
</tr>
<tr>
<td>talking about grandfather's death</td>
<td>slight smile</td>
<td>down reg</td>
</tr>
<tr>
<td>talking about when her father died</td>
<td>smile</td>
<td>eye role</td>
</tr>
<tr>
<td>do you remember being held-no, god, definitely not</td>
<td>laughs</td>
<td>pulls a face</td>
</tr>
<tr>
<td>felt rejected- yes definitely</td>
<td>laughs</td>
<td>down reg</td>
</tr>
<tr>
<td>how did you react at the time (grandmother's death) nothing really, any feelings? No. I don't think that it affected me that much</td>
<td>laughs in a dismissing way</td>
<td>laughs in a dismissing way</td>
</tr>
<tr>
<td>talking about being beaten up by mother</td>
<td>smiling</td>
<td>flat/matter of fact</td>
</tr>
<tr>
<td>talking about death of uncle through suicide</td>
<td>neutral</td>
<td>flat/matter of fact</td>
</tr>
<tr>
<td>I am still very angry about the people who did it, I know we are not going to get justice</td>
<td>neutral</td>
<td>matter of fact</td>
</tr>
<tr>
<td>do you remember being held by your parents? No, no,</td>
<td>slight smile</td>
<td>shakes head</td>
</tr>
<tr>
<td>did you have any relationship with your real father? No, none whatsoever</td>
<td>laughs</td>
<td>puts hand up to indicate no</td>
</tr>
<tr>
<td>talking about feeling helpless whilst watching step-father beating up mother</td>
<td>neutral</td>
<td>matter of fact</td>
</tr>
<tr>
<td>talks about how she did feel sad and it would have been nice to bury the hatchet, but how that feeling didn't last long</td>
<td>shrugs</td>
<td></td>
</tr>
<tr>
<td>did you ever feel rejected as a young child? 'did I? story of my life'</td>
<td>laughs</td>
<td>looks up</td>
</tr>
<tr>
<td>talks about her father knocking her and her sister's heads together and how mean it was to do this and how 'mad' it was</td>
<td>giggling</td>
<td></td>
</tr>
<tr>
<td>talking about taking an overdose of epilepsy medicine and being really gutted when she woke up</td>
<td>neutral</td>
<td>matter of fact</td>
</tr>
<tr>
<td>taking an overdose when relationship ended</td>
<td>smiles</td>
<td></td>
</tr>
<tr>
<td>talking about being hit by mother with jeans jacket</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>how did you respond? I cried</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>talking about separations from mum - I don't think I ever did anything or showed her that I missed her</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>Talking about feeling rejected by father when brother was born</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>Talking about her mum packing up and leaving her father whilst he was out of the house</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>Talking about mum threatening to leave her and putting on her coat</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>Talking about her mum physically threatening her</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>I remember being threatened to be hit something like that</td>
<td>laugh a little</td>
<td></td>
</tr>
<tr>
<td>Talking about how father was in a car crash and later died of liver cancer</td>
<td>neutral</td>
<td>flat/matter of fact</td>
</tr>
<tr>
<td>Talking about mum being accused of abuse by the school after her sister burned her</td>
<td>neutral</td>
<td>flat/matter of fact</td>
</tr>
<tr>
<td>Talking about how uncle had his legs taken off by a bus when he was run over</td>
<td>smiling</td>
<td>animated</td>
</tr>
<tr>
<td>Talking about how she had not seen father for two years and then she 'randomly saw him again' which was 'quite funny'</td>
<td>laughs</td>
<td></td>
</tr>
<tr>
<td>Talking about being hit by father</td>
<td>smiling</td>
<td>demonstrates the hair pulling and mimes the hitting.</td>
</tr>
<tr>
<td>it was very sad because for me it was like - well how am I going to look after my sister and how will I react towards my step father? Because as soon as she died he changed talks about how one day his mum didn't come back and he thought she had just stayed out late until he asked his sister who told him that his parents had had a big bust up and his mum had left. 'after she'd gone, it was horrible, I just literally lived in my room, it was just horrible in the house'</td>
<td>matter of fact</td>
<td>shrugs</td>
</tr>
<tr>
<td>if they weren't together I wouldn't have been born and the world would have been a very sad place - smiling slightly whilst talking about how parents didn't really fit together and ended up getting a divorce. Makes a joke</td>
<td>matter of fact</td>
<td>down-reg</td>
</tr>
<tr>
<td>its got to the point now, and this is the way our relationship has gone, where I actually ignore some of his phone calls (talking about dad)</td>
<td>laughs when he makes a joke</td>
<td>smiling</td>
</tr>
<tr>
<td>we were talking about bloke stuff like fighting and he said 'If any of you kick off at me you'll be going home in an ambulance' (age 16)-talking about father</td>
<td>laughs</td>
<td>down-reg</td>
</tr>
<tr>
<td>recounting incident of father being angry with him at age 6 years and telling him he's going to beat the living day lights out of him. 'I remember thinking he's not going to do it'</td>
<td>smiling</td>
<td>down-reg</td>
</tr>
<tr>
<td>my dad said to my mum I could shoot you you know. But he didn't even have a gun. He had a gun but it was a replicar. He had it pointing into her and I'd say dad it don't work (8 years old)</td>
<td>laughs</td>
<td>down-reg</td>
</tr>
<tr>
<td>my uncle Mick he was actually tragically run over by a lorry in London</td>
<td>slight smile</td>
<td>matter of fact</td>
</tr>
<tr>
<td>probed for more details about uncles death. Talks about the accident</td>
<td>matter of fact</td>
<td>down-reg</td>
</tr>
<tr>
<td>I had a hideous childhood</td>
<td>laughs</td>
<td>down-reg</td>
</tr>
<tr>
<td>he's there 'eat the food or I'll put the plate down your throat' but not..</td>
<td>smiles</td>
<td>down-reg</td>
</tr>
<tr>
<td>I was having a problem opening the door of the yard to get home after school-you've had a good day at school you know and standing outside not</td>
<td>laughs</td>
<td>down-reg</td>
</tr>
<tr>
<td>wanting to go inside</td>
<td>matter of fact</td>
<td>down-reg</td>
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<tr>
<td>when I was 14 I was sent to hospital for observation because I said I was going to kill myself</td>
<td>laughs</td>
<td>lack of affect whilst talking about abuse-smiles</td>
</tr>
<tr>
<td>threats? To abandon me know, kill me yes, but not abandon me</td>
<td></td>
<td>smiling/jolly</td>
</tr>
<tr>
<td>as long as when I started to speak there was a problem</td>
<td></td>
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<tr>
<td>talking about how upset she was when her friend died in a car accident and how her mum had asked her to come home earlier and her friend had thought that she was more interested in the car coming home than her- 'and that was just a week before'</td>
<td></td>
<td>smiling</td>
</tr>
<tr>
<td>then I went through phases of missing her terribly. I'd sit and cry and cry</td>
<td>smiles</td>
<td>nodding head</td>
</tr>
<tr>
<td>I've been held and knife point- I was mugged 19 months ago- yer, I was terrified then</td>
<td></td>
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<tr>
<td>I had contact (with parents) for my documents to come to the UK. There was an email saying you are on your own. I said, I'm on my own, doesn't matter we were altogether as a family there (in bungalow, age 11) but there was no love there, I didn't love my mother, there was never any love in my family she had an accident and broke her leg and I hid her crutches in the toilet so she couldn't get me- goes on to explain that she was very young and she hid them so she couldn't get her 'that wasn't very nice' she took after her mother- I was terrified of my nan I used to just go round and sit in that chair- I wouldn't move incase she told me off and she was a big woman how was the funeral for you: 'um, I can't think really'- death of mother 4 years ago a period of bullying for a few years. It wasn't nasty and it didn't happen very often but it was very unpleasant talking about getting into</td>
<td>smiling</td>
<td>shakes head</td>
</tr>
<tr>
<td>Fight as a boy</td>
<td></td>
<td></td>
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<td>---------------</td>
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<tr>
<td>Frightened or worried as a child? A bit of bullying. I had a well-developed sense of fear and preservation like most animals I suppose.</td>
<td></td>
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<tr>
<td>Talks about how father was very distressed and they would have shifts watching him 'I remember him waking me one night, and he was very distressed at the situation'.</td>
<td></td>
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<tr>
<td>Adjective: afraid- asked him a maths question and he wasn't patient and started to shout- I never asked him a question after that, I was afraid of him.</td>
<td></td>
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<tr>
<td>Talk about how father left her at kindergarten (age 3) and she didn't want to stay. Describes how she was crying and rushed after him and he was really 'pissed off' and he beat her and put her back into the classroom.</td>
<td></td>
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<tr>
<td>Describes another incident where father thought that she had spent the money that he had given her on something useless- he beat me, and afterwards found out that I had spent the money on a pen or a ruler and kept</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>matter of fact</th>
<th>down-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>smiling</td>
<td>down-reg</td>
</tr>
<tr>
<td>smiling</td>
<td>down-reg</td>
</tr>
<tr>
<td>matter of fact</td>
<td>down-reg</td>
</tr>
<tr>
<td>apologising to me</td>
<td>smiling</td>
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<tr>
<td>------------------</td>
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<tr>
<td>when 10 or 12, 'I got technician marks of about 68, and he was beating me' example to illustrate that father was disciplining</td>
<td>matter of fact</td>
</tr>
<tr>
<td>if me or my sister misbehaved we would be punished by getting on our knees outside the house so that the neighbours would see</td>
<td>laughs</td>
</tr>
<tr>
<td>talk about how he used to practice his writing and his dad came home from work and looked at the bad writing 'he got an iron ruler and just hit my fingers. It was so painful and from that time on I write very carefully'</td>
<td>laughs</td>
</tr>
<tr>
<td>I would say I chose the avoidant approach to cope because there is no way for her to accept</td>
<td>smiles</td>
</tr>
</tbody>
</table>
abusive? Oh yes of course, I told you earlier, he used to beat me, sometimes with a dogs lead, sometimes with a broom, depending what was to hand really

it probably happened a few dozen times until it all stopped

talking about how one son suffers from paranoid schizophrenia and the other is disabled and how the future is not to bright for them

there were times, particularly when her mother died that my mum was quite depressed. I remember a time when me my mum and my little brother were crying once because she was upset. She was upset about it for quite a while - that memory I was about 6

loving - yeh, when I went to boarding school he cried

do you remember being held by either of your parents at these times - no, I'm sure it did (happen), but just no clear memory

yeh, I cried and I was really upset, and I held on to my mum
talking about how sister responded to him crying when she went to boarding school. I think she probably found it quite funny and probably didn't want to go either but had to

I remember one time reading some creative writing to my dad and he rejected it, made fun of it, which was really harsh of him- what happened at those times? - yeh I distinctly remember running upstairs and crying and my granny came

why did granddad behave as he did? Because he was having a laugh with my dad. Do you think he realised the effect on you? Yeh, he was teasing

dad - why did he behave as he did (creative writing incident) - because him and my grandfather liked having a laugh and they were just taking the piss basically
<table>
<thead>
<tr>
<th>death of granddad when he was 13- at the time I didn't respond, I just kept messing around and didn't really work out what was going on, and then about a month later, strangely enough I was really upset and had to leave school for a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of facial signs of affect</td>
</tr>
<tr>
<td>response to death of school friend in a car crash when he was 18- shocked, that was the main thing and upset, but I didn't really see him enough to miss him</td>
</tr>
<tr>
<td>lack of facial signs of affect</td>
</tr>
<tr>
<td>fun- it made me mad but he just started picking them up and tossing them around the room (her stuffed animals). It wasn't funny to me at the time but he thought it was funny so I guess it was funny. When I was 7 I have pictures of myself surrounded by stuffed animals, but i was looking really upset because he was he had tossed them around the room then took pictures of me. Its sounds mean but it was really quite funny.</td>
</tr>
<tr>
<td>laughing hard</td>
</tr>
<tr>
<td>You didn't think it was funny at the time? no I just didn’t want my animals thrown around. But when I think of it now it was quite funny</td>
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<tr>
<td>talking about how her father was rational when she was ill and didn’t spoil her the way her mother did. ‘I guess I’ll stop crying now, I’m not getting anything from it’</td>
</tr>
<tr>
<td>talking about how she was in shock (death of grandfather) so could really feel anything, and thinking ‘I should have been more upset’</td>
</tr>
<tr>
<td>I remember it more in the younger years but when we moved to cyprus it kind of calmed down (the violence)</td>
</tr>
<tr>
<td>he used to slap my face a lot- he probably wasn’t aiming for those places</td>
</tr>
</tbody>
</table>
no both the deaths didn't affect me that much (cousin and grandfather who died of cancer when she was about 8/9). I had a kitten in cyprus who died and I cried about that

other traumatic things? Describes a burglary at her house where men with crow bars came in and threatened her and her parents- one smashed up the table and phone when she tried to call the police- 'so that's one thing, gosh' (smiles) speaking quickly some smiles matter of fact down-reg

my dad had an argument with my uncle and he threatened to come and put a bomb under our car so we had to drive our car to somewhere else... he didn't come but

laughs

when my mum was angry she would pick up a basin and throw it at me, but I didn't take it too seriously, it struck me as funny'

laughing smiling down-reg

its exciting and exhilarating thinking oh no mums going to kill me' talks about how mum used to threaten to slit his throat with a bread knife, be that he perceived this as only a joke

laughing smiling down-reg
<p>| I've had some experiences which some people might describe as traumatic but they bounced off my back quite easily | laughs | neutral affect | matter of fact | playing with hands on table, stretching out fingers, rubbing table | down-reg |
| my dad did threaten to hit me, but he didn't go through with it which was nice | laughs at the end | smiling | fiddling with hands, looks down | down-reg |
| recalls her sister being given a present when she went away 'I don't remember her doing anything like that for me. She probably did, but I don't remember' | neutral | | dodling on paper, looking down | down-reg |
| talking about being ignored: &quot;that would happen all the time&quot; | half laughing | | | down-reg |
| parent's response to first separation: &quot;they cried&quot; | laughs | | | down-reg |
| talks about being punished by father | laughs | | | down-reg |
| &quot;I suppose there were spankings too, which was socially acceptable...I don't think it scared me in a serious way&quot; | laughs | | | down-reg |
| talking about friend's funeral: &quot;everyone giving this sentimental speech&quot; &quot;and I stood up and told this funny story&quot; | laughing | | | down-reg |</p>
<table>
<thead>
<tr>
<th>talks about being raped at the age of 16 by a cousin (aged 25) after her drink was spiked - unsure of memories</th>
<th>avoiding eye contact</th>
<th>flat</th>
<th>down-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>talking about when she went in her room and cried and &quot;silly stuff like that&quot;</td>
<td>laughing</td>
<td>play acting/making fun of herself</td>
<td>down-reg/animation</td>
</tr>
<tr>
<td>&quot;I had a hell of a lot of childish fears... but that's about it&quot;</td>
<td>dismissive voice tone</td>
<td>playacts, but in a cheerful voice, as if making fun of herself</td>
<td>down-reg/animation</td>
</tr>
<tr>
<td>talking about being hurt physically: &quot;help me I am bleeding&quot;... &quot;but it wouldn't really upset me&quot;</td>
<td></td>
<td>flat voice/matter of fact tone</td>
<td>down-reg</td>
</tr>
<tr>
<td>&quot;people knew my father was drinking and that my mother was at home struggling with three kids, and that sort of thing was not really pleasant&quot;</td>
<td></td>
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<tr>
<td>talking about her father hitting her mother, but &quot;a very vague memory&quot;</td>
<td>matter of fact</td>
<td></td>
<td>down-reg</td>
</tr>
<tr>
<td>talking about father's death &quot;I didn't have any reaction to that&quot;</td>
<td>matter of fact</td>
<td></td>
<td>down-reg</td>
</tr>
<tr>
<td>talks about having a gun pulled on her 'and there is no one to help, there's nothing, and they rape. 95% of the time they rape... you are lucky if you get away alive ok' starts laughing - goes on to explain that she thought she was 'finished' whilst smiling</td>
<td>smiling</td>
<td>hands wide in big gesture</td>
<td>down-reg/animation</td>
</tr>
<tr>
<td>Event</td>
<td>Language/Verb</td>
<td>Mood/Tone</td>
<td>Cognition</td>
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<tr>
<td>She also told me in my life that she tried to get rid of me in the bath with a bottle of whisky — which she didn’t do because I’m still here, because she couldn’t afford two of us, that was one reason.</td>
<td>matter of fact</td>
<td>down-reg/cognition</td>
<td></td>
</tr>
<tr>
<td>So mummy went to hospital, she went to the London hospital.</td>
<td>childish language</td>
<td>child-like</td>
<td>down-reg/cognition</td>
</tr>
<tr>
<td>Anyway as I was growing up my father started coming into the bathroom. He wouldn’t let me lock the bathroom door. He used to frighten me at night. Mummy couldn’t do anything about it. It was awful and I used to get so angry at that man, I hated him so much.</td>
<td>matter of fact</td>
<td>down-reg/cognition</td>
<td></td>
</tr>
<tr>
<td>First girlfriend when 13/14, when she dumped me that was a disaster. I actually carved her name into my shoulder with a razor blade, which was unusual.</td>
<td>laughs</td>
<td>down-reg/self-under</td>
<td></td>
</tr>
<tr>
<td>Talking about how monkey was later taken away from her</td>
<td>affect change-happy and animated to sad</td>
<td>lability</td>
<td></td>
</tr>
<tr>
<td>Talking about how her cousins would laugh at her when she was told off</td>
<td>trails off</td>
<td>looks sad</td>
<td>looks down</td>
</tr>
<tr>
<td>Mood change when talking about parents being threatening</td>
<td>sad, mood dampens suddenly, lasts for a few minutes quieter voice tone</td>
<td>looks down, fiddling with hands</td>
<td>lability</td>
</tr>
<tr>
<td>talking about effect on her of friend's death</td>
<td>slow voice, quiet to point of being inaudible</td>
<td>looks down</td>
<td>lability</td>
</tr>
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<td>-------------------------------------------</td>
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<tr>
<td>subject suddenly bursts into tears when trying to find 5 adjectives; so far she has mentioned: painful, scary, uncertain, abused...</td>
<td>sits still, then suddenly bends forward, covers face with right hand and starts crying, sobbing</td>
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<tr>
<td>subject angrily recounts episode when mother treated her unfairly (involving a dice)</td>
<td>then begins crying again</td>
<td>angry voice</td>
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<tr>
<td>subject starts to cry, then struggling to continue with interview (over 3 min) when talking about mother's response to father's death - subject more emotional for the next 6 min</td>
<td>suddenly starts crying</td>
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<tr>
<td>subject does a sharp exhalation after saying that his mother died when he was 20, then puts his hand to his chest and says 'I have a pain in my chest, I don't like it'</td>
<td>sharpe exhalation of breath</td>
<td>puts hand to chest</td>
<td>up reg</td>
</tr>
<tr>
<td>&quot;a lot of this is really awful to talk about, you know... But, you know I am here&quot; at the beginning of the interview</td>
<td>inhales/emphasises 'really'</td>
<td>distressed</td>
<td>up reg</td>
</tr>
<tr>
<td>&quot;she would NEVER, EVER sympathise or anything&quot;</td>
<td>angry emphasis on 'never, ever'</td>
<td>angry accusing voice</td>
<td>up reg</td>
</tr>
<tr>
<td>starts crying again when remembering mother's unfair treatment: &quot;she never wanted me to be happy&quot;</td>
<td>sobbing, difficulty talking, hard to understand</td>
<td></td>
<td>up reg</td>
</tr>
<tr>
<td>Talking about when she was physically hurt</td>
<td>Gestures a lot with hands, illustrating what she is saying</td>
<td>Up-reg/animation</td>
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<td>--------------------------------------------</td>
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<tr>
<td>Becomes tearful, starts crying when talking about father's death</td>
<td>Starts crying, tearful</td>
<td>Up-reg</td>
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<tr>
<td>Talking about how stepfather sexually abused her as a child and when she told her father he drove her back to her mother's house and told her to go and tell her mother what she had just told him and drove off</td>
<td>Crying</td>
<td>Up-reg</td>
<td></td>
</tr>
<tr>
<td>When upset as a child what would you do? Probably run to my gran and when she wasn't around go into my room and start throwing toys around</td>
<td>Voice choked with emotion</td>
<td>Up-reg</td>
<td></td>
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<tr>
<td>I can't forgive myself for that (not seeing gran again before she died)</td>
<td>Suddenly starts crying</td>
<td>Up-reg</td>
<td></td>
</tr>
<tr>
<td>Talking about how kids at school used to tell her that her parents didn't love her because she was left for her gran to raise</td>
<td>Choked</td>
<td>Up-reg</td>
<td></td>
</tr>
<tr>
<td>Do these experiences effect you now? Oh yes definitely that's why if I don't hear from people for a while I begin to think I'll never hear from them again</td>
<td>Crying, voice choked with emotion</td>
<td>Up-reg</td>
<td></td>
</tr>
<tr>
<td>I never learned how to deal with arguments or with different situations that other children learn about—how to be a girl, do my hair and play with make up</td>
<td>crying intensifies</td>
<td>voice choked with emotion</td>
<td>up-reg</td>
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<td>I never got him back. So in his eyes I've done to him what my mother did to me. I deserted him, so that's another life down the line that got ruined (talking about own son)</td>
<td>crying intensifies</td>
<td></td>
<td>up-reg</td>
</tr>
<tr>
<td>talks about how she feels that people will never call her again when they are slow to get back to her—goes on to say that she thinks she can never change</td>
<td>starts crying and crying intensifies as she talks about the experience</td>
<td></td>
<td>up-reg</td>
</tr>
<tr>
<td>hate—recalls walking up to his dad at a party and undoing the zip on his trousers—'and he really, really got upset about that. I don't know why really'</td>
<td>looks emotional</td>
<td>looking down</td>
<td>up-reg</td>
</tr>
<tr>
<td>talking about death of wife's mother</td>
<td>starts to cry</td>
<td>looks down</td>
<td>up-reg</td>
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<tr>
<td>in the end people just pulled me off of him and he was really hurt bad and I wasn't hurt at all really</td>
<td>crying</td>
<td>crying, wiping eyes with tissue, looking down</td>
<td>up-reg</td>
</tr>
<tr>
<td>Cause I wasn't talking to my mum was I because she told me to go away from the bloody door- but he was dying. So I didn't spend a lot of time with him before he died because no one told me</td>
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<td>looks sad</td>
<td>looks down</td>
<td>up-reg</td>
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<tr>
<td>Recalls crying for hours and pacing around feeling depressed when friend and boyfriend left her at a campsite for hours. Feeling betrayed</td>
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<tr>
<td>tense/upset</td>
<td>wringing her hands</td>
<td>up-reg</td>
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<tr>
<td>I didn't know what I was supposed to be doing or how, you know? I just didn't know. So I was always worried I was going to upset him, but I didn't know what was going to trigger it you know...so it was quite hard. Yes that's it really</td>
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<tr>
<td>holding back tears</td>
<td>voice choked</td>
<td>up-reg</td>
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<tr>
<td>Thinking back I think it's a really disgraceful thing to do to a child but one time he punched me in the face and I remember leaning over the sink and there being lots of blood. Another time me lying on the floor and him kicking me in my head and stomach</td>
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<td>voice choked with emotion</td>
<td>up-reg</td>
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<td>Sad- memories of being in my room for hours and not being able to come out</td>
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<tr>
<td>voice choked with emotion</td>
<td>looking down</td>
<td>up-reg</td>
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<tr>
<td>and crying and crying</td>
<td>&quot;when my mom's sister's brother died, I wasn't sad in the last bit, he deserved it, he was a bastard&quot; (he was beating up aunt really badly)</td>
<td>raises voice to point of shouting</td>
<td>up-reg</td>
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<tr>
<td>&quot;she just always would beat me off&quot; - subject bursts into tears again</td>
<td>talking about how mum would shake the spoon draw as a way of threatening that they would get hit with a spoon and how her and her brother found this funny</td>
<td>big smile</td>
<td>up-reg</td>
</tr>
<tr>
<td>he's just rational (father), he's just a rational person, he's a little too rational, I can't have the emotion with him I can't get hysterical or just vent my feelings</td>
<td>excited and animated with hands</td>
<td>up-reg/animation</td>
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<tr>
<td>I'm sorry I'm just thinking about things I've done to her</td>
<td>suddenly starts crying</td>
<td>agitated</td>
<td>up-reg/hostile grievence</td>
</tr>
<tr>
<td>talking about how family have not been in contact with her for a long time goes on to talk about how she wrote to them to tell them she had taken an overdose and would be starting therapy</td>
<td>starts crying and crying intensifies as she talks about the experience</td>
<td>head in hands</td>
<td>up-reg/lability</td>
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<tbody>
<tr>
<td>sudden increase in emotional intensity when describing positive</td>
<td>tearful</td>
<td>emotional/breaking/cracking slightly</td>
<td>up-reg/abilitation</td>
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<td>memories about mum</td>
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<tr>
<td>starts crying when prompted to give examples about how</td>
<td>crying softly</td>
<td>emotional/breaking/cracking slightly</td>
<td>up-reg/abilitation</td>
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<td>relationship with father was loving</td>
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<tr>
<td>crying whilst talking about how her grandmother died when she</td>
<td>crying softly</td>
<td>emotional/breaking/cracking slightly</td>
<td>up-reg/abilitation</td>
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<td>was 14 and they weren't that close</td>
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<td>burst into tears when talking about father being really caring,</td>
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<td>then talking in normal voice again, only slightly emotional and</td>
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<td>depressed</td>
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<td>burst into tears, very emotional, moves forward, covers mouth</td>
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<td>with hand, sobbing</td>
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<td>talking about &quot;being adopted into a sick home&quot;</td>
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<td>talking about taking overdoses in early adolescence and being</td>
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<td>disappointed when she wakes up</td>
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<tr>
<td>burst into tears, very emotional, covers face with hand, tearful</td>
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<td>accusing voice, when interviewer suggests if she needs to take</td>
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<td>a break, subject gets up and leaves the table so that</td>
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<td>interview has to be interrupted</td>
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<tr>
<td>up-reg/abilitation</td>
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<tr>
<td>I wasn't bullied anymore after that, but I had to turn into this monster to do that- I don't like to think of it, but I have to confront it I suppose</td>
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<td>starts sobbing loudly, leans forward, head in hands</td>
<td>up-reg/self-under</td>
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<tr>
<td>when I got back to England I tried writing to an aunt of mine that lived just outside of Winchester and I got a letter back from her saying, your gran is with us, but don't bother contacting us, she's very ill, she's too ill for you to visit (about 16 at the time)</td>
<td>strong emphasis on aunt's words- acting her aunt's words?</td>
<td></td>
<td>angry</td>
<td>animation</td>
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<tr>
<td>apoloising to the interviewer for not being able to find adjectives</td>
<td>nervous laugh</td>
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<tr>
<td>talking about how her mother used to encourage her to buy expensive clothes</td>
<td></td>
<td></td>
<td>picks up jacket to demonstrate that it is expensive</td>
<td>animation</td>
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