

Borderline Personality Disorder: A study of adult personality and childhood trauma.

Nicole Milburn

Supervisor: Dr Denise Charman.

Submitted as part of the research requirement for the Doctor of Psychology (Clinical)  
at Victoria University.

## Declaration



I declare that this thesis does not incorporate any material previously written by another person except where due reference is made in the text.

I further declare that this study has adhered to the ethical principles as established by the Psychology Ethics Committee of Victoria University and the Clinical Research and Ethics Committee for the Western Healthcare Network.

Signature

A large black rectangular box redacting the signature.

Name NICOLE MILBURN

Date 28/1/00

STA THESIS  
616.85852 MIL  
30001005875325  
Milburn, Nicole  
Borderline personality  
disorder : a study of adult  
personality and childhood

Table of Contents

**DECLARATION.....II**

**ACKNOWLEDGMENTS ..... III**

**TABLE OF CONTENTS.....V**

**LIST OF TABLES.....X**

**LIST OF. FIGURES.....XII**

**ABSTRACT.....XII**

**CHAPTER 1: INTRODUCTION AND OVERVIEW..... 1**

1.1 RESEARCH QUESTIONS ..... 11

*Study 1* ..... 11

*Study 2* ..... 12

**CHAPTER 2: LITERATURE REVIEW .....13**

2.1 PERSONALITY DISORDERS.....13

2.2 DIAGNOSIS OF BORDERLINE PERSONALITY DISORDER ..... 17

2.3 THEORIES OF THE AETIOLOGY OF BPD ..... 19

*Otto Kernberg's Psychodynamic Theory*.....20

*Judith Herman's Trauma Theory*.....24

*Aaron Beck's Cognitive Theory*.....27

*Marsha Linehan's Dialectical Behaviour Therapy*.....30

*Summary* .....37

2.4 EMPIRICAL STUDIES OF BPD .....45

    2.4.1 *History of Trauma* .....45

    2.4.2 *Post Traumatic Stress Disorder* .....62

    2.4.3 *PTSD and BPD*.....66



2.4.4 Dissociation.....	69
2.4.5 Summary.....	80
2.4.6 Alternative diagnostic categories of PTSD.....	81
2.4.6 Personality Measurement .....	87
2.4.7 Methodological considerations. ....	114
2.5 CONCLUSION AND AIMS.....	121
2.5.1 Hypotheses .....	125
<b>CHAPTER 3: METHOD.....</b>	<b>126</b>
3.1 PARTICIPANTS.....	126
3.2 MEASURES.....	128
3.2.1 Traumatic Antecedents Interview (TAI).....	128
3.2.2. Dissociative Experiences Scale (DES) .....	131
3.2.3. Minnesota Multiphasic Personality Inventory-2 (MMPI-2) .....	133
3.2.4. Rorschach Test.....	136
3.3 PROCEDURE .....	141
3.3.1 Methods of Recruitment.....	142
3.3.2 Data Collection.....	143
3.3.3 Analysis.....	145
<b>CHAPTER 4: RESULTS.....</b>	<b>152</b>
4.1 PRELIMINARY RESULTS: TAI SCORING AND RELIABILITY .....	152
4.2 DEMOGRAPHIC DATA .....	171
4.3 QUANTITATIVE ANALYSIS.....	176
4.3.1 Hypothesis 1: People Diagnosed with BPD Will Have A History Of Childhood Trauma .....	176
4.3.2 Hypothesis 2: People Diagnosed with BPD Will Have Dissociative And Post Traumatic Stress Symptomatology.....	196
4.3.3 Hypothesis 3: There Will Be A Consistency Of Personality Structure Among Adults Diagnosed With BPD.....	198

4.3.4 Hypothesis 4: Severity Of Childhood Trauma History Will Be Positively Related To  
Dissociation, Post Traumatic Stress Symptomatology, And Severity Of MMPI-2 Clinical  
Profile.....214

4.3.5 Summary of Quantitative Analysis.....232

4.4 QUALITATIVE ANALYSIS.....237

4.4.1 Negative Association between Trauma and Dissociation.....241

4.4.2 Negative Correlation Between Trauma And Dissociation in Context of no Emotional  
Neglect.....267

4.4.3 High TAI and DES Scores.....277

4.4.4 Low MMPI-2-PK And PS Scores.....288

4.4.5 Summary of Qualitative Analysis.....300

4.5 SUMMARY.....304

**CHAPTER 5: DISCUSSION.....306**

5.1 QUANTITATIVE RESULTS .....306

5.1.1 Hypothesis 1: People Diagnosed with BPD have a History of Childhood Trauma.....306

5.1.2 Hypothesis 2: Post Traumatic Stress Symptomatology .....332

5.1.3 Hypothesis 3: Adult Personality Profile.....338

5.1.4 Hypothesis 4: Severity of Childhood Trauma History will be Positively Related to  
Dissociation, Post Traumatic Stress Symptomatology, and Severity Of MMPI-2 Clinical  
Profile.....350

5.1.5 Summary.....361

5.3 CONCEPTUAL IMPLICATIONS.....364

5.3.1 Theoretical Implications.....364

5.4 CLINICAL IMPLICATIONS.....401

5.5 METHODOLOGICAL ISSUES WHICH MAY HAVE CONTRIBUTED TO FINDINGS.....410

5.6 CONCLUSION.....416

**CHAPTER 6: STUDY TWO: POSSIBLE EFFECTS OF PARTICIPATING IN STUDY ONE  
.....419**

6.1 INTRODUCTION .....	419
6.2 LITERATURE REVIEW .....	421
6.2.1 <i>Effects of Research Participation</i> .....	421
6.2.2 <i>Comparison of research participation with clinical psychological assessment</i> .....	426
6.2.3 <i>Possible effects of the TAI</i> .....	436
6.2.4 <i>Aim of Study Two and Hypotheses</i> .....	443
6.3 METHOD.....	445
6.3.1 <i>Participants</i> .....	445
6.3.2 <i>Measures: Trauma Research Experience Evaluation Questionnaire (TREEQ)</i> .....	447
6.3.3 <i>Procedure</i> .....	454
6.4 RESULTS .....	456
6.4.1 <i>Hypothesis 1</i> .....	460
6.4.2 <i>Hypothesis 2</i> .....	461
6.4.3 <i>Hypothesis 3</i> .....	463
6.4.4 <i>Qualitative Data</i> .....	464
6.4.5 <i>Summary</i> .....	465
6.4 DISCUSSION .....	466
6.4.1 <i>Methodological issues</i> .....	480
6.5 CONCLUSION.....	484
<b>CHAPTER 7: CONCLUSION AND FUTURE DIRECTIONS.....</b>	<b>487</b>
7.1 CONCLUSION.....	487
7.2 FUTURE DIRECTIONS .....	499
<b>REFERENCES .....</b>	<b>507</b>
APPENDIX I: <u>SYMPTOM CHECKLIST</u> .....	536
APPENDIX II: TRAUMATIC ANTECEDENTS INTERVIEW.....	542
APPENDIX III: EDITED SCORING CRITERIA FOR THE TAI .....	593
APPENDIX IV: DISSOCIATIVE EXPERIENCES SCALE (DES).....	597

APPENDIX V: APPROVAL OF THE RESEARCH AND ETHICS COMMITTEE OF THE WESTERN  
HEALTHCARE NETWORK.....608

APPENDIX VI: APPROVAL OF THE VICTORIA UNIVERSITY ETHICS COMMITTEE.....609

APPENDIX VII: LETTER OF INTRODUCTION.....610

APPENDIX VIII: PLAIN LANGUAGE STATEMENT.....613

APPENDIX IX: VOLUNTARY CONSENT FORM.....616

APPENDIX X: TRAUMA RESEARCH EXPERIENCES EVALUATION QUESTIONNAIRE (TREEQ).....618

APPENDIX XI: STUDY TWO COVER LETTER.....626

List of Tables

TABLE	PAGE
1. FREQUENCY AND TYPE OF SELF-INJURIOUS BEHAVIOUR .....	77
2. FREQUENCY OF TRAUMA.....	78
3. DESCRIPTIVE AND $\bar{x}$ STATISTICS FOR THE TAI .....	79
4. PERCENTAGE OF THE SAMPLE REPORTING CHILDHOOD TRAUMA ACCORDING TO AGE AND TRAUMA CATEGORY .....	82
5. COMPARISON OF MEAN TAI CATEGORY SCORE FOR EACH DEVELOPMENTAL AGE WITH A HYPOTHETICAL PROTECTED POPULATION .....	84
6. DESCRIPTIVE STATISTICS FOR POSTTRAUMATIC STRESS AND DISSOCIATIVE SYMPTOMATOLOGY .....	85
7. DESCRIPTIVE STATISTICS FOR THE MMPI-2 VALIDITY SCALES (IN T-SCORES) .....	88
8. DESCRIPTIVE AND $\bar{x}$ STATISTICS FOR THE CLINICAL SCALES OF THE MMPI-2. ....	90
9. RORSCHACH RESULTS .....	91
10. SPEARMAN RANK CORRELATION COEFFICIENTS FOR ALL TESTS (N=10) .....	93
11. DES, TAI, AND MMPI-2- PK AND PS RAW SCORES FOR EACH INDIVIDUAL .....	94
12. CASES IDENTIFIED TO SHED LIGHT ON NEGATIVE CORRELATION BETWEEN TRAUMA AND DISSOCIATION. ....	103
13. DIAGNOSTIC CRITERIA FOR COMPLEX POST TRAUMATIC STRESS DISORDER .....	158
14. DESCRIPTIVE AND $\bar{x}$ STATISTICS FOR THE RELATIONSHIP AND SYMPTOM SCALES OF THE TREEQ.....	196

List of Figures

FIGURE	PAGE
TAI SCORE BY ABUSE CATEGORY AND DEVELOPMENTAL AGE .....	83
2. MEAN PROFILE OF BASIC SCALES OF THE MMPI-2 FOR THE SAMPLE.....	87
3. SCATTERPLOT OF TOTAL TAI AND DES SCORES.....	95
4. SCATTERPLOT OF PS AND PK ON DES SCORES. ....	96
5. SCATTERPLOT OF NUMBER OF MMPI-2 ELEVATIONS ON DES SCORES .....	97
6. SCATTERPLOT OF PK AND PS SCORES ON TAI SCORES .....	98
7. MEAN RELATIONSHIP AND SYMPTOM SCALE SCORES FOR EACH PARTICIPANT .....	197

## ABSTRACT

Borderline Personality Disorder (BPD) is a complex phenomenon which poses a considerable challenge to mental health researchers and clinicians. This research aimed to investigate childhood trauma history and BPD, and possible overlap with Post Traumatic Stress Disorder, following a path set by Herman and van der Kolk (e.g. Herman, Perry & van der Kolk, 1989; Saxe et al., 1993). This path was broadened to include a study of adult personality profile using the MMPI-2 and Rorschach Test. A subsidiary aim, developed as a result of the difficulties recruiting participants, was to investigate the experience of participants taking part in the research. Ten female outpatients diagnosed with BPD took part in the Traumatic Antecedents Interview (TAI) (van der Kolk et al., 1991; Herman, Perry & van der Kolk, 1989), a semi-structured interview schedule looking at childhood trauma experiences of sexual abuse, physical abuse, witnessing domestic violence, emotional and physical neglect, separation and loss and family chaos. Participants also completed the MMPI-2 and Dissociative Experiences Scale (Carlson & Putnam, 1993; Bernstein & Putnam, 1986). Five participants completed a valid Rorschach Test. Results show that participants reported significant childhood trauma history, dissociation, and post traumatic stress symptomatology. Participants were found to experience both cumulative and nested traumatic experiences. The MMPI-2 profile was consistent within the sample and with other research findings (Gartner, Hurt & Gartner, 1989). Dissociation was not positively related to severity of childhood trauma, severity of MMPI-2 profile, or severity of post traumatic stress symptomatology. This may have reflected a two-way effect of PTSD where patients

can experience a dominance of overwhelming intrusive symptoms or psychic numbing and dissociation. Results from Study 2 show that there was no change in PTSD symptoms between Study 1 and Study 2 on a measure developed to evaluate the experience of participating in Study 1. This measure included items specifically addressing PTSD symptoms. Participants reported positive experience of the relationship with the researcher. Results overall support a growing body of research attesting to the existence of childhood trauma history in patients diagnosed with BPD. Specific theories of BPD were found to inadequately incorporate empirical findings and a broadening of approach to include developmental perspectives is warranted.



## CHAPTER 1

### INTRODUCTION AND OVERVIEW

Borderline Personality Disorder (BPD) is characterised by a "pervasive pattern of instability of interpersonal relationships, self-image, affects, and marked impulsivity that begins by early adulthood and is present in a variety of contexts" (APA, 1994, p. 650). Although well defined, the condition is not well understood. Traditionally BPD has been conceptualised as resting on the border between the psychoses and the neuroses (Kernberg, 1975). There is an increasing body of literature which points to a history of trauma and an associated experience of dissociation for a significant proportion of those with this diagnosis (e.g. Brodsky, Cloitre & Dulit, 1995; Shearer, 1994; Herman, Perry & van der Kolk, 1989). The co-existence of a childhood trauma history and dissociation suggests that the phenomenology of BPD may be a manifestation of character development occurring in a chronically abnormal context through the experience of prolonged trauma, and therefore overlaps with disorders of post traumatic stress. Indeed, research has revealed that trauma and post traumatic stress symptomatology is part of the phenomenology of BPD (Shearer, 1994; Saxe et al., 1993).

The phenomenology of BPD also includes dissociation, which is in the diagnostic criteria for PTSD in DSM-IV as well (APA, 1994). Severe dissociative states are also included in the diagnostic criteria for BPD; however, they were not one of the diagnostic criteria in the previous edition (APA, 1987) and the inclusion in

the updated version is a reflection of the growing body of research documenting dissociative states in people diagnosed with BPD.

The literature is still inconclusive, however, regarding a number of aspects of BPD. The clinical picture of BPD is well known but the developmental aetiology is not (APA, 1994). Mixed results have been found regarding discrepancies in the proportions of people diagnosed with BPD who have a history of childhood trauma, dissociation and post traumatic stress symptomatology (Saxe et al., 1993; Shearer, 1994). Disorders other than BPD have also been linked to childhood trauma history, including hysterical seizures (Goodwin, Simms, & Bergman, 1979) and Axis II disorders other than BPD (Brown & Anderson, 1991). Therefore, further investigation is required into the long-term effects of childhood trauma on the development of adult personality.

Research to date has primarily taken a reductionist approach in attempting to find a single experience that is common to all people diagnosed with BPD. For example, one line of research has focused on the additive or cumulative effects of more than one type of childhood trauma (e.g. Herman, Perry, & van der Kolk, 1989). However, these approaches do not take into account the 'nested' effect of trauma on personality development in childhood. 'Nested trauma' refers to the experience of traumatic experiences in the context of a traumatic or withholding environment. An example of nested trauma is the experience of sexual abuse perpetrated by an uncle in the context of the father's unpredictable alcoholism and mother's depression

In adult mental health anecdotal evidence from clinicians is the basis for a negative impression of the treatment and prognosis of patients with BPD. The nature of BPD symptoms and the care such people require make it hard for clinicians to

maintain their empathy in the face of very difficult and demanding behaviour; this makes it hard for clinicians to keep working with people diagnosed with BPD on a long-term basis. The resulting increase in the workload of already overworked mental health workers can tend to foster resentment of the patient. The desperate state of many people diagnosed with BPD also sparks feelings of helplessness in workers, which can lead to blaming the victim in order to protect the workers' self from overwhelming feelings (Herman, 1992).

Health professionals in adult psychology and psychiatry have a mandate to determine diagnosis. However, the process of diagnosis cannot capture the developmental context central to understanding the experience of BPD patients. Achieving such understanding can be very challenging for clinicians. For example, many clinicians have mixed beliefs about the efficacy of having a client tell a story of trauma (Herman, 1992). Nevertheless, effective treatment options for clients must necessarily be directly related to their experience of themselves and the world. It is important for clinicians to understand the life experience of the client in order to help clinicians form a basis for treatment. Diagnosis alone is insufficient in this context, and can result in a poverty of treatment options.

It had originally been proposed to investigate the above questions with multivariate methodology with a sample size of 40 people diagnosed with BPD. The study as proposed was not possible due to the great difficulty in having participants referred to the project. The reasons for this can only be speculated upon, but may include the changes experienced in the mental health system in Victoria at the time of data collection, which resulted in increased workload for clinicians. Clinicians, however, did express concerns that the research may upset the client and perhaps lead

to hospitalisation or acting out of inner emotional difficulty, perhaps by para-suicidal behaviour. After considerable effort and much time, ten women were referred to take part in the research. Each participant undertook a semi-structured interview about experiences of childhood trauma (Herman et al., 1989), and completed the Dissociative Experiences Scale (DES) (Carlson & Putnam, 1993; Bernstein & Putnam, 1986). Each participant also completed the Minnesota Multiphasic Personality Inventory-second edition (MMPI-2). Seven participants completed the Rorschach Test, with five producing valid protocols (see Method section 3.3.2).

The tools described above provided a thorough history of the person and their traumatic experiences, a measure of current dissociation and an indication of adult personality profile. The MMPI-2 Post-Traumatic-Stress-Disorder Scales (MMPI-PK and MMPI-PS) (Keane, Malloy, & Fairbank, 1984; Schlenger & Kulka, 1987) provided an indication of current post traumatic stress symptomatology.

In order to accommodate the reduced sample size and the desire to understand the client's experience, the methodology of the first study was modified to a more exploratory, in-depth study of the aetiology and symptomatology of BPD. Group results have been reported in terms of frequencies and significant differences have been reported using single sample *t*-tests. Individual differences have been reported using case vignettes where appropriate in order to communicate the richness of the data and keep a focus on the individual's life experience. These types of changes to methodology in reaction to environmental difficulties are not uncommon in naturalistic research where the object is to "get to know people well enough to know how they see the world" (Wadsworth, 1997; p. 24) and where there is often little control over aspects of the research.

The apprehension expressed by some clinicians regarding the possibility of distressing patients through recounting their trauma history led to the addition of another research question: what was the participants' experience of the research? A short questionnaire was developed based on the trauma theory of Herman (1992). This questionnaire was used to assess possible changes due to participating in Study 1 of the research.

Overall, the research aimed to investigate participants' perception of childhood events, including the research process itself, in adulthood, thus taking a phenomenological and experiential approach.

## 1.1 Research Questions

### Study 1

1. Do people diagnosed with BPD have a childhood trauma history?
2. Do people diagnosed with BPD have symptoms of stress disorders, including dissociation?
3. Is there consistency in the personality structure among people diagnosed with BPD?

### Study 2

What is the effect of retelling the trauma history?

The thesis describes these two studies, and reflects upon the impact of childhood trauma on personality development and adult personality profile of patients with BPD. In doing so, the answers to the questions posed above were attained and reflected upon. Results of the second Study are specifically used to examine the

individual experience of participating in clinical research of a challenging or demanding nature.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Personality Disorders

Personality Disorders are listed on Axis II of the current Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (APA, 1994). The importance of personality disorders is reflected by their listing on a separate axis to major psychiatric disorders and serves to ensure their consideration in every diagnosis. According to DSM-IV, a personality disorder is "an enduring pattern of inner experience and behaviour that deviates markedly from expectations 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" (APA, 1994, p. 629). Clinicians are reminded that when making a diagnosis of personality disorder the "personality traits that define these disorders must also be distinguished from characteristics that emerge in response to specific situational stressors" (APA, 1994, p. 629), that is, they must be pervasive rather than reactive behaviours.

Traditionally, personality disorders have been conceptualised through a psychodynamic framework (e.g. Kernberg, 1975), but recently cognitive-behavioural theories have arisen (e.g., Beck, 1993; Linehan, 1993). Aaron Beck (1993) has put forward a cognitive theory of personality, which is based on interlocking and hierarchical systems of "schema's" that select and interpret information. Personality traits are taken to be the outward expression of inner schema. Essentially, a personality disorder occurs when a person's system of schemas processes information

in a selective and dysfunctional way. These dysfunctional schemas have developed through the interaction of the individual's genetic make up with exposure to other people and traumatic events. Beck points out that "if unusually frequent negative events have occurred in someone's life, a pessimistic bias about one's self, world and future is not unlikely" (1993, p. 11).

The object relations school of psychodynamic theory has made thorough attempts to understand personality development throughout the lifespan. The object relations perspective has paid close attention to the intricacies of personality development as it occurs within the context of the individual's relationship to both people and the broader environment. Cameron and Rychlak (1985) state that "a personality disorder arises when some distortion of the personality develops early in life and persists as a person's style, as the characteristic way in which he or she copes with the environment and defends against real or imagined threats to personality competence and integrity" (p. 456). These authors also state that a person with a personality disorder is vulnerable under stress to the emergence of a psychotic or neurotic disorder, or a psychosomatic illness, which may manifest as an exaggeration of the already present distorted personality organisation (Cameron & Rychlak, 1985).

## 2.2 Diagnosis of Borderline Personality Disorder

One of the more severe personality disorders, Borderline Personality Disorder (BPD), has been conceptualised as being on the border between psychosis and neurosis (Kernberg, 1975).

BPD is one of the most commonly used Axis II diagnoses, and accounts for approximately 15 to 25% of all diagnoses in clinical populations (Gunderson &



Zanarini, 1987). BPD is characterised by a “pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity that begins by early adulthood and is present in a variety of contexts” (APA, 1994, p. 650). There are nine criteria, of which five are sufficient for a positive diagnosis of BPD. The nine criteria are:

1. Frantic efforts to avoid real or imagined abandonment.
2. A pattern of unstable and intense interpersonal relationships characterised by alternating between extremes of idealisation and devaluation
3. Identity disturbance: markedly and persistently unstable self-image or sense of self
4. Impulsivity in at least two areas that are potentially self-damaging (e.g. spending, sex, substance abuse, reckless driving, binge eating).
5. Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour.
6. Affective instability due to a marked reactivity of mood
7. Chronic feelings of emptiness
8. Inappropriate, intense anger or difficulty controlling anger
9. Transient, stress-related paranoid ideation or severe dissociative symptoms. (APA, 1994, p. 654).

### 2.3 Theories of the Aetiology of BPD

There are a number of theories of the development and dynamics of BPD. One of the first comprehensive theories specific to BPD is that of Otto Kernberg (1975).

### Otto Kernberg's Psychodynamic Theory

Otto Kernberg (1975) formulated the best known theory of the aetiology of BPD from the object relations perspective of psychodynamic psychology. Kernberg hypothesised that BPD forms when a child becomes fixated during the separation-individuation phase of development of the infant's autonomy from the mother.

The separation-individuation phase of development is when the infant begins to recognise that he or she is separate from its mother. The recognition that one is separate from one's mother, and therefore an individual, constitutes the beginnings of a sense of self, and awareness of the outside world, or ego functioning. Successful separation and individuation is dependent upon the infant's confidence that his or her mother will provide emotional and physical protection throughout the process of moving away from her. If successful, the end result is referred to as self-object differentiation, which describes the full realisation that the infant is a separate being from its mother and the rest of the world.

In theory, an outcome of successful separation and individuation is an internalised image of the mother that the infant can carry around with it throughout the lifespan. This internal image can be drawn upon for nurturance, and also contributes to an internal image of the self as a whole object, or individual identity.

Many factors may disrupt the process of separation and individuation. If there are barriers to successful separation from the mother in infancy then the crisis of separation-individuation will be revisited in times of stress. At these times of stress, the person may experience extreme separation anxiety, and fear that their attempts to separate from their mother would leave them abandoned and alone. They may also fear that their mother would actually disappear. Feelings of fear and anxiety may not

necessarily be centred on the actual mother, but may be aroused in a difficult situation in any relationship.

In Kernberg's theory of BPD, the crisis of inability to separate from the mother comes about through a disruption in the mother's emotional availability during this crucial period. The disturbance may be due to parenting problems, such as the mother's need for the child as central to her own self image, to an oversupply of aggression in the child, or an interaction of the two. The disruption of separation-individuation also disrupts the internalisation of the mother, or object. The failure to internalise the object, and resultant lack of internalised objects, creates the pattern of disturbed relationships and intense fears of abandonment that complicate these relationships further (Kernberg, 1975).

Kernberg's theory has been criticised for being too narrow, by focusing on a crisis in one developmental phase and not explaining the complexity of BPD (Gabbard, 1995). The empirical data also suggests that both parents have tended to fail the child who grows up with BPD, not just the mother (e.g. Weaver & Clum, 1993; Zweig-Frank & Paris, 1991; Nash et al., 1993). The empirical data also seems to suggest that Kernberg's theory, with its focus on separation and loss, does not adequately account for the findings of childhood trauma in the histories of people diagnosed with BPD (e.g., Becker, Sanders, & Chinsky 1995; Herman et al., 1989; Landecker, 1992; Saunders, 1991).

### Judith Herman's Trauma Theory

The trauma theory of Judith Herman has attempted to take into account the effect of childhood trauma on people diagnosed with BPD (1992). Herman has proposed that survivors of child abuse are over-represented in the diagnoses of

somatization disorder, BPD and Dissociative Identity Disorder (DID), and that these diagnoses are the modern equivalent of hysteria. The three diagnostic categories share in common hypnotisability, or dissociation, interpersonal difficulties, difficulties in forming trusting relationships, identity disturbance, and, finally, a history of childhood trauma. Herman put forward a new diagnostic category of 'Complex Post-Traumatic-Stress-Disorder' to account for people who have had experiences such as those listed above (1992, p. 123). Criteria for the diagnosis include a history of "subjection to totalitarian control over a prolonged period" including prisoners of war as well as domestic "prisoners" of abuse. The diagnostic criteria also includes alterations in affect regulation, such as suicidal preoccupation or self-injury; consciousness; perception of self and perpetrator; relations with others; and systems of meaning (1992, p. 121). This diagnosis was put forward for DSM-IV, but was not included (APA, 1994).

Herman's diagnostic category has extended the existing category of PTSD by including traumatic events that occur over a period of time and personality changes that may result from such experiences. The diagnosis of Complex Post Traumatic Stress Disorder therefore applies people diagnosed with BPD who describe childhood trauma histories. However, the diagnosis is not specific to BPD, and although it reflects personality change due to trauma, it does not take into account the disruption of personality development itself and instead suggests the alteration of an already existing, or partially formed, personality. Herman's (1992) theory, however, does reflect recent advances in empirical research on both BPD and childhood trauma and attempts to describe the phenomenology of adult BPD.

### Aaron Beck's Cognitive Theory

Another theory focusing on the phenomenology of adult BPD is that of Aaron Beck (Beck, Freeman, & associates, 1993). Beck points out three basic assumptions that play a central role in the phenomenology of BPD. These are "The world is dangerous and malevolent", "I am powerless and vulnerable"; and "I am inherently unacceptable" (Beck et al., 1993, p. 186). Behaviour is based on these basic assumptions, which are perpetuated when actions are interpreted through the filter of the basic assumption. For example, an individual with BPD is constantly vigilant for dangerous situations, which they inevitably see, and so the belief that the world is a dangerous place is reinforced. The three basic assumptions place the individual in a difficult situation: "convinced that they are relatively helpless in a hostile world, but without a source of security, they are forced to vacillate between autonomy and dependence without being able to rely on either" (Beck et al., 1993, p. 197). This dilemma reinforces the pattern of dichotomous thinking common to people diagnosed with BPD.

Dichotomous thinking is thinking in terms of extreme polarity. One consequence of dichotomous thinking is that "extreme evaluations of situations lead to extreme emotional responses and extreme actions" (Beck et al., 1993, p. 187). The dramatic shifts in behaviour and rapid mood swings that are characteristic of BPD are therefore consequences of dichotomous thinking (Beck et al., 1993).

Beck's theory is not clear regarding the aetiology of BPD. However, the assumption from his writing is that he adopts Young's concept of maladaptive schema's in childhood which result in maladaptive behaviour patterns, which in turn reinforce the maladaptive schema's (Young, 1987). Beck does not adequately explore

the specific development of BPD as it differs from other personality disorders or normal personality development. These are fundamental obstacles to the usefulness of his theory to the investigation of BPD.

### Marsha Linehan's Dialectical Behaviour Therapy

Although taking in aspects of other theories, Dialectical Behaviour Therapy is essentially based on a biosocial view of BPD (Linehan & Kehrer, 1995). The theory states that "BPD is primarily a dysfunction of the emotional regulating system" (Linehan & Kehrer, 1995, p. 402). Emotional dysregulation, which is the combination of emotional lability and difficulty moderating emotional reactions, develops essentially through biological and environmental factors. The individual's temperament, genetic make-up, and experiences of traumatic childhood events, which may have affected the development of the brain and nervous system, are among the biological factors influencing the development of emotional dysregulation. However, Linehan has pointed out that emotional dysregulation alone is not sufficient to develop BPD (Linehan & Kehrer, 1995).

According to Linehan, people diagnosed with BPD have come from environments that invalidate their experience (Linehan & Kehrer, 1995). An invalidating environment occurs when the major care-giver has tended to negate or undermine the individual's emotional and behavioural experience in a variety of ways. For example, emotions may be mis-labeled by care-givers, problems may be presented as easily solved, and emotional displays may be reacted to with disdain, blame, or punishment. Care-givers in invalidating environments also tend to be inappropriately intrusive of private experiences—particularly personal feelings—and endeavour to control emotional expressiveness in the families. These conditions result in the adult

with BPD having never developed the capacity to identify, label and regulate emotions and their display (Linehan & Kehrer, 1995).

Confusion and dysregulation in the emotional sphere impacts on interpersonal relationships and the definition of the self (Linehan & Kehrer, 1995). A coherent sense of self, in turn, is dependent on self-regulation of emotions. According to Linehan, the invalidating environment in which the person with BPD has battled shapes the adult expression of emotion; swinging between extreme inhibition and overwhelming display (Linehan & Kehrer, 1995).

Linehan's theory of BPD is one that places heavy emphasis on treatment using Dialectical Behaviour Therapy and does not provide a more detailed understanding of the development of BPD from childhood to adulthood. However, the theory does provide some guidance for understanding behavioural patterns that are central to the difficulties of people diagnosed with BPD.

Linehan (1993) describes three problematic behavioural patterns, or 'dialectical dilemmas' that commonly describe behavioural difficulties of people diagnosed with BPD. Each patient does not necessarily exhibit behaviour from each dialectical dilemma. However, patients diagnosed with BPD tend to oscillate between the extremes of each dilemma. The first dialectical dilemma is 'emotional vulnerability versus self invalidation'. Linehan observed that, through emotional dysregulation, people diagnosed with BPD are chronically vulnerable to experiencing extremes of emotional while simultaneously lacking the capacity for self validation. Therefore they cannot validation their own emotional vulnerability, which sets impossible standards of behaviour. Failure to reach the impossible standards promotes emotional vulnerability (Linehan, 1995).

The second dialectical dilemma is active passivity versus apparent competence (Linehan, 1995). Lacking the capacity for emotional self regulation, the patient diagnosed with BPD tends to rely upon the environment. The patient tends to feel ashamed at socially undesirable dependence on the environment and learns to inhibit his or her feelings of helplessness and negative affect. This leads to a state of 'active passivity' whereby the patient actively does not seek that which he or she needs from the environment. The patient diagnosed with BPD also can seem competent in a variety of situations on the one hand, but not be able to maintain this competence in the same situation on a different day. The difficulty in carrying competence across situations is due to the difficulty in emotional regulation: the same situation can seem easy to cope with in a good mood and impossible when in a bad mood. The patient tends to oscillate between the extremes of apparent competence-which cannot be extended to most situations because of a difficulty in predicting behavioural capacity-and active passivity. The patient seems to be able to operate in the situation or not, with no in between. This dilemma can be exceedingly frustrating to the patient's family, friends, and therapist and can result in behaviour being interpreted as aggressive when the patient seems like they 'won't' rather than 'can't'. (Linehan, 1993).

The third dialectical dilemma is the pattern of swinging between unrelenting crises versus inhibited grieving (Linehan, 1993). Linehan states that many of the dysfunctional behaviours of patients diagnosed with BPD are 'responses to a state of chronic, overwhelming crisis' (1993; p. 85). The constant state of crisis is debilitating, particularly as the patient already has a vulnerability to emotional extremes. On the other hand, the patient often has not been able to integrate loss and fully experience



the emotions associated with grief-they<sup>0</sup> show a pattern of 'inhibited grieving'. Inhibited grieving makes it almost impossible to experience pain associated with current crises, and a state of perpetual crisis prevents working through of past grief. Linehan noted that inhibited grieving 'overlaps considerably with posttraumatic stress disorder' (1993; p. 89).

The dialectical dilemmas described by Linehan (1993) are useful in understanding current repetitive behaviour patterns seen in patients diagnosed with BPD. However, an understanding of how such behaviour patterns develop is essential in treatment and prevention of BPD. Linehan's (1993) theory is insufficient in this regard.

### Summary

Attempts at understanding the development and phenomenology of BPD have come from a number of different frameworks. Beck's cognitive theory of BPD focused primarily on the interaction of dichotomous thinking on feelings and behaviour (Beck et al 1993). Beck's theory goes some way towards describing the complex interaction between dichotomous thinking and impulsive behaviour (1993), however the theory does not describe BPD in the context of personality development or consider the childhood trauma commonly described by individuals with BPD.

History of trauma is the central focus of Herman's theory of Complex Post Traumatic Stress Disorder, subsuming the diagnosis of BPD (1992). Although Herman describes the difficulty in developing a normal personality in a situation of repeated trauma, the mechanics of personality development are not dealt with in depth. This detracts from understanding the clinical presentation of adult BPD specifically, and the need for in-depth, comprehensive treatment.

Linehan's theory (Linehan & Kehrer, 1995) is comprehensive in describing the interaction between the child who grows up to have BPD and his or her invalidating environment, and the effect this has on adult behaviour. However, trauma history and its effect on the development of the individual personality are not dealt with in sufficient depth.

Finally, Kernberg's (1975) object relations' theory provides a developmental perspective of BPD. However, the theory of BPD developing through fixation at the separation-individuation phase of development is narrow, and does not take into account the effect of trauma on personality development.

There seems to be some difficulty in integrating the many facets of BPD into a coherent and comprehensive theory that is grounded in personality development and empirical research. This difficulty may reflect a parallel process with the disorder. BPD is characterised by splitting phenomena and it seems that there has been a theoretical split between those who incorporate childhood trauma history in understanding BPD and those who do not.

To understand the phenomenon that is BPD it is important to consider general theories of personality development. Although there are many theories of personality development, one of the most comprehensive is Erikson's (1969) theory of personality development throughout the lifespan.

### Erikson's Theory of Lifespan Development

Erikson (1969) proposed a stage theory of psychosocial development, which can provide a framework for understanding normal personality development and where deviations from normal development can occur to result in personality disorder.

According to Erikson, the first task of life as such is to develop basic trust through the mother-infant relationship (1969). This occurs through interactions between the mother and child whereby the child is protected and has its essential needs met, such as food, warmth, and safety. At the end of the first year the child will have developed the sense of trust that his or her needs will be met. Between the ages of two and three a sense of autonomy is developed, predominantly through the processes of toilet training and gaining control over bodily functions without a loss of self-esteem. Ages four to five see the child developing a sense of initiative through identification with his or her parents to try to achieve goals. A sense of guilt occurs if efforts to develop initiative are confounded. From the age of six to puberty the child is engaged in learning. The process of learning develops the sense of industry over a sense of inferiority (Erikson, 1969).

Once the child becomes an adolescent the sense of identity develops through all of the physiological and psychological changes to do with sexual urges combined with social pressure to make educational or occupational decisions (Erikson, 1969). At this stage the adolescent must integrate the parts from childhood into a coherent whole, or result in fragmented identity diffusion where the adolescent isn't sure who he or she really is. Young adulthood is the time for intimate relationships, both sexual and non-sexual, through which a sense of connection and intimacy develops. Failure to achieve these interpersonal gains results in a sense of isolation. During middle adulthood the achievements of prior development, particularly in identity and intimacy, promote a time for production, both in career and in family. All developmental milestones are required to produce offspring as trust, autonomy, initiative, and industry, as well as a sense of knowing who one is and the capacity for

---

intimacy, all contribute to the ability to produce children and provide a conducive environment for their development. If generativity is not undertaken, a process of stagnation and self absorption can result (Erikson, 1969).

At the end of the lifespan the task is to look back with a sense of understanding and wisdom and develop the integrity to face death knowing the limitations of life (Erikson, 1969). Despair can result if this is not achieved (Erikson, 1969).

Eriksons' (1969) theory of development, as briefly described above, is a stage theory. For optimum development each stage is successfully passed through and the achievements are used to aid in securing future gains. If the development is interrupted at any stage then the child will continue on without the skills necessary for optimum development and essentially will negotiate new situations as best they can without adequate developmental tools (Erikson, 1969).

## 2.4 Empirical Studies of BPD

### 2.4.1 History of Trauma

The association between childhood trauma history and adult BPD has been well established in research literature (e.g. Shearer, 1994; Zweig-Frank & Hallie, Herman et al 1989; Saxe et al 1993). The childhood trauma histories described by adults diagnosed with BPD have been found to be complex and encompass many interacting factors. In order to tease out the experiential picture of BPD, researchers have focused on a variety of areas, including adult recollections of childhood experiences of trauma (e.g. Herman et al., 1989; Oldham, Skodo, Gallaher, & Kroll,

1996) and family environment (e.g. Zweig-Frank & Paris, 1991; Briere & Elliot, 1993), and the experiences of children (eg. Guzder, Paris, Zelkowitz, & Marchessault, 1996) and adolescents (Ludolph et al., 1990) who display borderline pathology. The variety of focus and findings in the research has not provided firm evidence for any of the theoretical understandings of BPD.

Herman and her colleagues (Herman et al., 1989) carried out a benchmark study of childhood trauma experiences from the perspective of adult inpatients with BPD. This study compared patients with BPD, borderline traits, and other closely related diagnoses (schizotypal personality disorder, antisocial personality disorder, or bipolar II affective disorder). Patients were diagnosed as having BPD if they met five or more of the DSM-III criteria for the disorder, while those with borderline traits met at least four of the criteria (APA, 1980). The research found that significantly more of the 21 adults diagnosed with BPD reported histories of childhood trauma compared to those with borderline traits and those with psychiatric diagnoses other than BPD (81%, 73% and 52% respectively). Childhood trauma experiences included physical and sexual abuse, witnessing domestic violence, physical and emotional neglect, separation and loss from significant others, and having a chaotic family environment. The increase in borderline pathology with increased childhood trauma suggests that severity of reported childhood trauma is related to severity of borderline pathology (Herman et al., 1989).

Childhood trauma histories of people diagnosed with BPD have been researched regarding the specific incidence of abuse in the context of other traumatic experiences. Herman's study found that the majority of the borderline group reported significant abuse. Seventy one percent (71%) of the borderline group reported

physical abuse, 67% reported sexual abuse, and 62% reported having witnessed domestic violence (Herman et al., 1989). These findings are similar to those in other studies. For example, a recent study of patients applying for treatment in a specialist personality disorder unit found that 75% of the BPD patients reported having experienced some type of abuse, including verbal, physical, and sexual abuse or neglect (Oldham et al., 1996). Another contemporary study found that 65% of a group of psychiatric inpatients with BPD reported having experienced sexual or severe physical abuse, and 89% had experienced physical abuse only (Fonagy et al., 1996). Weaver and Clum (1993) also found that BPD patients reported significantly more sexual and physical abuse and higher 'witnessed violence' than non-borderline subjects. Thus, the majority of patients with BPD report physical, sexual, or verbal abuse in childhood, and often more than one type of abuse experience.

Evaluation of research linking childhood abuse and BPD must take into account both sex differences and epidemiological factors concerning the BPD diagnosis. Based on the research findings of childhood trauma histories and BPD, it has been suggested that people are being diagnosed with BPD because of childhood trauma history alone. Brown and Anderson (1991) investigated 947 psychiatric inpatients and found personality disorders were diagnosed significantly more frequently in abused patients than non-abused patients. Clinicians in the sample were aware of the abuse history of the patient before the diagnosis was made. This raises the question of how influential is the presence of a history of abuse in making a diagnosis of BPD.

Brown and Anderson's (1991) study also found significant sex bias in terms of BPD diagnosis, with more females having a diagnosis of BPD than males. Brown and

Anderson's (1991) finding that females tend to report abuse more than males has also been found in other studies (e.g. Guzder et al., 1996; Herman et al., 1989). The reluctance of men in reporting abuse history may have significant bearing on results of reported incidence of childhood trauma in BPD. In fact, Herman's significant finding of trauma for the people diagnosed with BPD but less so for those with borderline traits may have been affected by the fact that the borderline trait group was entirely male, while the BPD group was predominantly female (17 women versus four men). Therefore, sex is a significant factor in research findings regarding childhood trauma histories of BPD patients, and results suggest that incidence of childhood trauma may be under-reported in mixed sex samples. A higher reported incidence of childhood trauma in female patients may contribute to sex bias in diagnosis of personality disorders if clinicians base their diagnosis on abuse history (Brown & Anderson, 1991).

Age as well as sex has been found to be a significant factor in research findings regarding childhood trauma histories of BPD patients. The age at which the trauma occurred was found to be significant for people diagnosed with BPD in the Herman study, but not for those with borderline traits or other psychiatric diagnosis (Herman et al., 1989). Patients experienced more trauma experiences between the ages of seven and 12 years, that is, in the latency period of development (Herman et al., 1989). A more recent study also reported that patients with BPD described more sexual and physical abuse and more witnessed domestic violence between the ages of seven and 12 years than at other times (Weaver & Clum, 1993). These results support Herman's conclusion that people diagnosed with BPD were found to have suffered

more abuse, more variety of abuse, beginning earlier and lasting longer than comparison groups (Herman et al., 1989).

The findings that trauma experiences tend to peak in latency have led some researchers to study children in that age group with borderline traits (Guzder et al., 1996). A recent study of children aged seven to 12 years found a relatively lower reported incidence (24%) of childhood sexual abuse than that found in adults with either BPD or borderline traits (e.g. Herman et al., 1989). The finding that 24% of the borderline group had been sexually abused may be quite high for a population with a mean age of 10 years (Guzder et al., 1996). However, abuse may have been under-reported due to the dominance of males over females in the sample (73% males in the borderline group and 86% in the non-borderline group). The high ratio of boys in the research is unusual and was not explained, although the participants were consecutive referrals to a child-psychiatry day-treatment centre (Guzder et al., 1996).

Despite the dominance of males in the sample, Guzder found traumatic experiences differentiate between borderline and non-borderline children (Guzder et al., 1996). Risk factors for the borderline group were sexual abuse, physical abuse, severe neglect, and parental substance abuse or criminality. Cumulative abuse—a number of different experiences of abuse—and cumulative parental dysfunction scores were both higher in the borderline group. Cumulative abuse was correlated with cumulative parental dysfunction and also with severity of borderline pathology (Guzder et al., 1996). Therefore, the association between traumatic experiences in childhood and borderline pathology has been established at the time of the trauma as well as for years afterwards in adulthood.



Adolescence is in between adulthood and childhood, and research on borderline adolescents therefore completes a developmental picture of borderline pathology. Ludolph and her colleagues (Ludolph et al., 1990) conducted a comprehensive study of adolescents with borderline pathology. Adolescent inpatient females with BPD were compared to an inpatient sample without BPD. Scores above or equal to seven on the Diagnostic Interview determined diagnosis of BPD for Borderline Patients (DIB) (Ludolph et al., 1990). Again, patients with BPD reported more abuse and more types of abuse than patients without BPD (Ludolph et al., 1990). This finding confirms a developmental pathway of BPD from childhood to adulthood that involves significant and extensive childhood trauma experiences.

The consideration of the role of childhood trauma in the development of BPD leads to the question of the family context in which childhood trauma experiences occur. Ludolph and her colleagues' study of adolescents with borderline pathology focused on familial factors as well as abuse and found that patients with BPD had suffered significant neglect, maternal rejection, grossly inappropriate parental behaviour, parental loss, number of surrogate mothers and fathers, number of relocations, physical abuse and sexual abuse. The study also found that maternal risk factors of psychiatric illness or disorder, losses, separation and abuse were significantly more common in the BPD group than the comparison group. Also of note, paternal risk factors of the same type were higher than maternal risk factors in both groups. This finding suggests that both parents are important in personality development, and that the experience of having two parents emotionally unavailable due to psychiatric illness, loss, separation or abuse is considerably worse than having only one parent unavailable due to such factors in two-parent families (Ludolph et al.,

1990). The research raises the question of single-parent families and the effect on children of having their only parent unavailable due to factors such as psychiatric illness or abuse.

Adult borderline patients' memories of the parental care they received as children have been studied (Zweig-Frank & Paris, 1991). This study compared 62 male and female patients with BPD (28 male and 34 female) with 99 university students who did not have BPD (45 male and 54 female) using a self-report measure of dimensions of parental care and protection. The study has shown that BPD outpatients in their late 20's remember both parents as less caring but more controlling and protective than university students without BPD. The results supported psychoanalytic theories of the aetiology of BPD involving difficulties in the separation-individuation phase of development—the authors state that "Borderline patients are telling us that they remember their parents as both failing to provide basic emotional support and preventing them from separating" (Zweig-Frank & Paris, 1991, p. 650). The results also support Linehan's notion of the invalidating environment where parents are controlling and emotionally intrusive (Linehan & Kehrer, 1995).

A study by Weaver and Clum (1993) does not support Zweig-Frank and Paris' (1991) earlier finding of BPD patients' reports that their parents prevented them from separating. Weaver and Clum (1993) studied 36 depressed female inpatients, 17 of who were diagnosed with BPD, and found no difference in separation and loss between the two groups. Differences were noted in the family atmosphere of the two groups, with patients with BPD reporting significantly less family cohesiveness and less familial expressiveness than the non-BPD group (Weaver & Clum, 1993).

Patients diagnosed with BPD also reported more conflict and control in the family than the non-BPD group. These results reflect the interaction between trauma and family environment in the aetiology of BPD (Weaver & Clum, 1993), and provide some evidence for Linehan's theory of an invalidating environment in children who grow up to have BPD (Linehan & Kehrer, 1995).

Another study investigating familial factors focused on the childhood attachment status reported in adult psychiatric inpatients with BPD (Fonagy et al., 1996). Forty three percent (43%) of people diagnosed with BPD were classified as having attachment in childhood which was characterised by being preoccupied and fearful about traumatic events (Fonagy et al., 1996). Preoccupied attachment status was defined as passivity in the interview regarding childhood experiences that were not well defined, while fearful attachment was illustrated in the interview by a fearful preoccupation with traumatic events in childhood (Fonagy et al., 1996). A child's attachment to his or her parents is very important in considering difficulties in the separation-individuation stage of development, and preoccupied or fearful attachment indicates disruption in this phase. A strong, positive, attachment in childhood would be protective for successful separation from the parents and the process of developing a coherent sense of individual self.

Therefore, there is a growing body of research attesting to the fact that adults diagnosed with BPD report significant childhood trauma histories in the context of a family environment which has essentially failed to protect them from, and has often perpetrated, trauma.

Already discussed has been the influence of childhood traumatic experiences in the phenomenology of adult BPD. Findings of common childhood trauma history in

people diagnosed with BPD have lead researchers to investigate the overlap between Post Traumatic Stress Disorder and BPD.

#### 2.4.2 Post Traumatic Stress Disorder

The diagnosis of PTSD has developed from “shell-shock” in World War I, “war neurosis” in World War II, through to PTSD based largely on the experiences of veterans from the Vietnam War (Herman, 1992). The DSM-IV describes PTSD as following “an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one’s personal integrity”, witnessing such an event, or learning about a similar event experienced by someone close (APA, 1994, p. 424).

According to DSM-IV there are two ways that people manifest posttraumatic stress symptomatology (APA, 1994). The first way is when the person re-experiences the trauma in an overwhelming and intrusive manner, for example through flashbacks, dreams, and psychological distress. The second way of reacting to the trauma is by cutting off from the experience, for example through avoidance, psychic numbing, or dissociation. To fulfil DSM-IV criteria, the person must experience both intrusive and avoidance behaviour, as well as increased arousal through, for example, sleeping difficulty, hypervigilance, or increased anger. These symptoms must be experienced for more than one month, and must be distressing for the person (APA, 1994).

The DSM distinguishes between acute and chronic PTSD, with chronic status being reached after three months of symptoms, and also gives examples of appropriate traumatic events (APA, 1994). These include one-off events such as terrorist attack, sexual assault, mugging, car accidents, and being diagnosed with a life-threatening illness. The diagnosis of PTSD resting on the experience of a one-off

traumatic event omits the impact of events that may have taken place over a long period of time, such as wife battering or childhood sexual abuse. Similarly, the diagnosis does not indicate the extent of the effect that the traumatic event may have on adult personality and personality development from childhood.

Therefore, the diagnosis of PTSD does not necessarily include adults who have childhood histories of trauma—and therefore a time lag between the trauma and the symptomatology—who nevertheless may have many of the symptoms described above. However, the diagnosis does emphasise a traumatic event causing psychological distress, and on this basis has been investigated in relation to both childhood trauma and BPD.

#### 2.4.3 PTSD and BPD

Although the diagnosis of PTSD has been found to be applicable to children with borderline pathology and recent traumatic experiences such as sexual abuse (Guzder et al., 1996), studies of adults have had mixed results. These results have ranged from no PTSD symptoms (Herman et al., 1989), to a 'high co-morbidity' (though not actually specified) between BPD and PTSD (Saxe et al., 1993).

Fonagy and his colleagues (Fonagy et al., 1996) conducted an investigation of PTSD and BPD. The study found that the effects of childhood trauma were present in adulthood. Eighty nine percent (89%) of psychiatric inpatients with BPD were unresolved, or still had difficult emotional issues, with respect to loss or trauma (Fonagy et al., 1996). The unresolved status was indicated by disorganisation, characterised by lapses in monitoring reason and discourse when the attachment figure or trauma was discussed in interview. Therefore, the results support the

premise that patients with BPD have difficulties specifically related to childhood trauma history, and that childhood trauma has had a major impact on personality development (Fonagy et al., 1996). These findings further blur the distinction between BPD and PTSD in people diagnosed with BPD who have childhood trauma histories.

It has recently been suggested that a diagnosis of BPD or PTSD may depend as much on the sex of the patient as the symptomatology (Becker & Lamb, 1994). One recent study of 1080 mental health clinicians (Becker & Lamb, 1994), including psychologists, social workers and psychiatrists, found that clinicians diagnosed a 'female' case study with BPD more often than an identical 'male' case study. These authors also concluded that the diagnosis of PTSD was generally under-utilised in adult cases where childhood trauma is a factor in the history (Becker & Lamb, 1994). Even so, it has been suggested that both the BPD and PTSD diagnoses are insufficient to describe the phenomenology of what is currently called BPD, and that an intermediate diagnosis such as Herman's category of Complex Post Traumatic Stress Disorder (1992) may more accurately describe the clinical picture (e.g., Landecker, 1992; Herman, 1992).

#### 2.4.4 Dissociation

Research investigating the overlap between PTSD and BPD has resulted in dissociation being established as a symptom of BPD according to DSM-IV (APA, 1994). The experiences of dissociation and childhood trauma history that people diagnosed with BPD describe have led some researchers to investigate the overlap between BPD and Dissociative Disorders.

Dissociation is part of the diagnostic criteria for both BPD and PTSD (APA, 1994). The DSM-IV describes dissociation as “a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment” (APA, 1994, p. 477).

#### 2.4.4.1 Dissociation and trauma

People with adult dissociative states have been found to have histories of childhood trauma, whether it is sexual, physical, or psychological abuse (e.g. (Zlotnick et al., 1995; Shearer, 1994; Kirby, Chu & Dill, 1993). The association between dissociation and childhood trauma history has been reported for patients with Dissociative Disorders (Saxe et al., 1993), adolescents (Saunders & Giolas, 1991), and female inpatients of unspecified diagnosis (Waldinger, Sweet, Frank & Miller, 1994; Zlotnick et al., 1995).

Studies of women who report childhood trauma and dissociation have investigated specific aspects of traumatic experiences in relation to dissociation (Waldinger et al., 1994). Research with 90 female inpatients, 65% of whom reported childhood histories of physical or sexual abuse, or both, found that those who had been sexually abused in childhood had significantly higher dissociation scores than those who hadn't. This trend was also found for physical abuse, but was not statistically significant (Waldinger et al., 1994).

Another study of 90 female inpatients also found a significant correlation between childhood sexual abuse and dissociation (Zlotnick et al., 1995). This study also found that adult dissociation was positively related to having witnessed sexual and physical abuse in childhood and childhood neglect (Zlotnick et al., 1995).

Age of first experience of sexual abuse may be a factor in the severity of adult dissociation (Waldinger et al., 1994). Patients who had been first sexually abused before the age of six had the highest dissociation scores, followed by those who were first abused in adolescence. Those who were first sexually abused after the age of 18 years obtained similar scores on the Dissociative Experiences Scale (DES) to those who had not been sexually abused at all. These results indicate that the experience of sexual abuse at a young age is related to severity of adult dissociation, and is a strong risk factor for later psychopathology (Waldinger et al., 1994).

Studies of the relationship between dissociation and childhood trauma have extended from sexual and physical abuse to include separation and loss (Zlotnick et al., 1995). Zlotnick found that experiencing the death of someone close did not result in greater severity of dissociation for 90 female psychiatric inpatients of unspecified diagnosis, and having a close relationship with a parent, sibling or friend did not result in protection against dissociation (Zlotnick et al., 1995). These findings contradict Kernberg's theory of the difficulty in the separation-individuation stage of development being paramount to the development of borderline psychopathology (Kernberg, 1975).

According to Kernberg's theory, a close and realistic relationship with someone, particularly a parent, would be a protective factor for later psychopathology (Kernberg, 1975). Zlotnick and her colleagues explain their unexpected findings by pointing out that the death of someone close is usually not shrouded in secrecy and associated with guilt and shame, as is childhood abuse. They further point out that close relationships may not impact positively on traumatic experiences as they do less severe experiences (Zlotnick et al., 1995). Therefore, the



research by Zlotnick and her colleagues has found a significant positive correlation between childhood trauma of a specific nature and dissociation in adulthood. Specifically, the trauma was likely to be untreated or unsupported, or both (Zlotnick et al., 1995).

In summary, given the literature that this author has reviewed, there is evidence that traumatic events experienced in childhood may be related to the development of dissociative responses that linger into adulthood (e.g. Zlotnick et al., 1995; Waldinger et al., 1994).

#### 2.4.4.2 Dissociation and BPD

Research investigating dissociation and BPD has focused on the differential diagnosis between BPD and dissociative disorders (DDs), and it has been suggested that both BPD and DDs "represent the sequelae of prolonged repeated trauma" (Lauer, Black & Keen, 1993, p. 133).

A study of mainly female psychiatric inpatients found that all 15 patients with DDs – 10 of whom had BPD – had suffered sexual abuse and neglect in childhood, compared with 21% of the comparison group without DDs (Saxe et al., 1993). Differences were found regarding age: people with a dissociative disorder reported more physical abuse during childhood (0-6 years) and latency (7-11 years) and more witnessing of violence was reported during latency and adolescence (12-18 years). The high DD group also reported significantly more sexual abuse, neglect and family chaos across all three developmental ages than the low DD group (Saxe et al., 1993). However, the fact that the study focused on people with dissociative disorders rather than BPD makes it difficult to discern the exact situation of the two thirds of the DD

sample who had BPD. Nevertheless, those in the sample who had suffered the most childhood trauma were in the high DD group, and, by definition, suffering significant dissociation. These findings illustrate the overlap between BPD, childhood trauma history, and presence of serious dissociation in adulthood.

Further research into dissociative disorders and BPD has found that female psychiatric inpatients with Dissociative Identity Disorder (DID) had higher DES scores than inpatient females with a diagnosis of BPD and DD-Not Otherwise Specified (Shearer, 1994). Those in the sample who had reported childhood sexual and physical abuse were also clearly distinguished by their higher DES score from those who had experienced other trauma. Regression analysis revealed that adult sexual assault, behavioural dyscontrol, both sexual and physical abuse in childhood, and a non-significant trend for PTSD symptoms predicted DES score (Shearer, 1994).

These findings are in direct contrast to research which found that none of the psychological factors involving negative childhood experiences were related to dissociation (Zweig-Frank, Paris & Guzder, 1994). In the research, negative childhood experiences involved childhood sexual and physical abuse, separation or loss from a parent before the age of 16 years, and abnormal parental bonding (Zweig-Frank, Paris & Guzder, 1994). The research found that BPD diagnosis itself, rather than negative childhood experiences, was associated with higher scores on the DES (Zweig-Frank et al., 1994). This finding suggests that dissociation may be inherent to the phenomenology of BPD.

Shearer's study also found a tendency for trauma to have an additive effect in predicting DES scores (1994). He concluded that multiple trauma and dissociative

experiences were almost linearly related, and that depersonalisation and derealization may represent a phenomenological sense of disintegration that is common to BPD, PTSD and DDs (Shearer, 1994). Shearer's study directly raises the issue of whether separate diagnostic categories for these three disorders actually exist, or whether there may be grounds for another category, or for collapsing some criteria to account for the overlapping symptomatology seen in clinical practice.

Another study specifically investigating the difference between DID and BPD found that there were few significant differences between 14 female patients with DID and 13 patients with BPD, 11 of whom were women (Lauer et al., 1993). This study found that 64% of people with DID also met the criteria for BPD. There were no significant differences found in family history, and all subjects had a history of both physical and sexual abuse. Dissociation was found to be higher for the people with DID than for those with BPD, suggesting DID is an extreme version of BPD and both are consequences of severe childhood trauma (Lauer et al., 1993).

#### 2.4.5 Summary

Empirical research has established that people diagnosed with BPD report having experienced childhood trauma and adult dissociation (e.g. Herman et al., 1989; Shearer, 1994). Research has also found an overlap between BPD and PTSD (Shearer, 1994) and DDs (Lauer et al., 1993). These research findings have raised considerable diagnostic issues regarding the coherence of the BPD and PTSD diagnoses, and have lead some researchers to investigate new diagnostic categories.

#### 2.4.6 Alternative diagnostic categories of PTSD

There have been two major diagnostic categories put forward as alternatives to the DSM-IV (APA, 1994) diagnosis of PTSD in attempts to incorporate the effects of both early and chronic trauma on adult functioning (Herman, 1992, van der Kolk, 1996). There have also been attempts to tease out the trauma picture by the identification from PTSD literature of six typologies of PTSD (Alcaron, 1997). The diagnosis of Complex PTSD arising from Herman's trauma theory has already been discussed (see section 2.3 above). The second major alternative diagnostic category has been put forward by van der Kolk (1996).

The diagnosis of 'Disorders of Extreme Stress Not Otherwise Specified' (DESNOS) was proposed for inclusion in DSM-IV (van der Kolk, 1996). The diagnosis was proposed to provide a more comprehensive definition of PTSD and also to incorporate findings from current research. DESNOS described symptoms from five main categories: alterations in regulating affective arousal, attention and consciousness, somatization, chronic characterological changes (e.g. Altered self perception, perception of perpetrator and alterations in interpersonal relationships), and alterations in systems of meaning. DESNOS, like Complex PTSD (Herman, 1992), thus sought to incorporate the impact of early trauma on adult personality that has been identified in research literature (e.g. Shearer, 1994; Saxe et al, 1993; Lauer et al, 1993). According to van der Kolk, the DSM-IV field trials found that 'the older the victims were, and the shorter the duration of trauma, the more likely they were to develop only the core PTSD symptoms; the longer the trauma, and the less protection, the more pervasive the damage' (1996; p. 202). This finding suggests that there may be different typologies of PTSD, or at least that the current DSM-IV

PTSD diagnosis (APA, 1994) does not accurately reflect the clinical picture of disorders due to trauma.

Coming from the belief that the current DSM-IV classification of PTSD into acute, chronic and delayed-onset types (APA, 1994) is of little clinical usefulness, Alcaron and his colleagues reviewed the PTSD literature to investigate other typologies (Alcaron, et al, 1997). The considerable research into clinical typology's of PTSD will not be reviewed here due to need for brevity. After reviewing the literature, these authors proposed six clinical types of PTSD: depressive, dissociative, somatomorphic, psychotomorphic, organomorphe and neurotic-like that were clearly identifiable as presenting a separate cluster of symptoms in addition to the core DSM-IV PTSD symptoms. As the name suggests, the depressive type showed a strong presentation of depressive symptoms such as low self-esteem and psychomotor retardation along with the core PTSD symptoms. The dissociative type had a dominance of dissociative symptoms such as flashbacks, depersonalisation, and fugue-like behaviour, and was mostly associated with combat experiences and a history of childhood physical or sexual abuse. The psychotomorphic type describes those diagnosed with PTSD who also experience a reactive psychosis, and the organomorphe type describes those patients who also have significant organic symptoms such as loss of memory, cognitive deficits and difficult in concentration and learning. Patients in the neurotic-like type present with anxiety symptoms such as psychomotor tension, panic, and avoidant behaviour. The authors also put forward a personality disorder type for further investigation which may identify those patients with a diagnosis of PTSD who present with a pattern of hostility and impulsive behaviour, and a detached or self defeating interactive style (Alcaron et al, 1997). The

identified clinical types are more descriptive than the DSM-IV PTSD (APA, 1994) categories and encompass the symptoms of BPD.

The investigation of different typologies of PTSD (Alcaron et al, 1997) and the proposition of alternative diagnostic categories (van der Kolk, 1996; Herman, 1992) represent efforts to understand the complex reactions to trauma that are seen clinically, including alterations to personality and subsequent personality disorders such as BPD. The impact of trauma on personality development has been investigated from the perspective of investigating adult personality. If BPD represents a coherent diagnosis, a consistent personality profile would be expected to emerge on standardized instruments.

#### 2.4.6 Personality Measurement

Psychologists routinely approach clinical personality assessment in two ways. The first and simplest way is via subjective paper and pencil measures such as the Minnesota Multiphasic Personality Inventory (MMPI) (Butcher & Graham, 1994). This type of personality assessment provides an indication of what the person is aware of thinking and feeling — many questions are straightforward, and the respondent can see easily what is being assessed. Complements to this type of personality assessment are the projective methods. The most famous of these methods is the Rorschach Inkblot test, which uses inkblots as a stimulus on to which people project their personality. Projective and subjective methods combine to provide a profile of the unconscious and conscious personality of an individual.

#### 2.4.6.1 MMPI-2

The MMPI-2 is one of the most commonly used personality tests in both clinical and research practice (Butcher & Graham, 1994). The MMPI-2 provides a profile of personality traits, as well as delineating between normal and abnormal aspects of clinical symptomatology (Hathaway & McKinley, 1991). The profiles include validity scales, as well as basic clinical scales, supplementary scales and content scales. Taken together these scales provide a comprehensive picture of personality in a clinical context. Because of the effectiveness of the MMPI-2 in assessing personality, it has been used commonly in research into a wide range of psychiatric disorders.

The MMPI-2 has superseded the original MMPI in recent years, but has been found to be essentially equivalent to the original version in terms of research and clinical purposes (Butcher & Graham, 1994). The MMPI and MMPI-2 have been used extensively in investigations of diagnosis and differential diagnosis of clinical syndromes to aid in research and clinical practice.

A review of the literature of psychological test signs of BPD concluded that profiles of the clinical scales tend to have a large number of elevations above a T-score of 70 (Gartner et al., 1989). These authors concluded that an average of six out of nine of the clinical scales tend to be elevated for people diagnosed with BPD, not including the Mf scale which was not normed on a psychiatric population. One of the most reliable findings for MMPI profiles of patients with BPD was that of the 'inverted V-shape' of the validity scales, with a low L, very high F, and low K. Very high F scores generally indicate an invalid profile due to faking 'bad' responses (Hathaway & McKinley, 1991). The authors conclude that the MMPI profiles overall

"typically show signs of thought disorder, impulsivity, depression, anxiety, anger and suspiciousness" (Gartner et al., 1989, p. 430). Gartner and his colleagues' review of the research literature illustrate that BPD can be reliably identified using the MMPI-2 (Gartner et al., 1989).

The MMPI has been found to successfully differentiate between BPD, depression, and schizophrenia (Gandolfo, Templer, Cappelletty & Cannon, 1991). Depression and schizophrenia are the major differential diagnoses for BPD (APA, 1994). Gandolfo and his colleagues analysed the MMPIs of adult inpatients with schizophrenia (77), major depression or dysthymia (77), and BPD (83). Sixty three percent of the sample was female. The groups were found to be significantly different on seven of the 13 scales (Gandolfo et al., 1991).

Although scales 3 and 8 differentiated between BPD patients and patients with schizophrenia, the two groups were not significantly different on scales F and 9 (Gandolfo et al., 1991). Scales F and 9, however, successfully differentiated between the depressed group and the BPD/schizophrenia group. Overall, the patients with BPD scored highest on scale 4 (Gandolfo et al., 1991). These results show that specific scales of the MMPI-2 can be used successfully in differential diagnosis of BPD, schizophrenia, and depression.

Gandolfo and his colleagues found that six of the ten clinical scales were elevated above a T-score of 70 for the BPD group, which is in accordance with other research findings (Gartner et al., 1989). The overall profile of BPD subjects was more elevated than those of either the depressed group or those with schizophrenia (Gandolfo et al., 1991). The authors concluded with the suggestion that BPD may be



better conceptualised as an Axis I diagnosis to take into account the magnitude and intensity of subjective distress reported (Gandolfo et al., 1991).

The profile of women who have been sexually abused in childhood, but do not necessarily have BPD, has also been investigated (Nash et al., 1993). This research found that, overall, women who had been sexually abused in childhood reported more pathology than those with no childhood sexual abuse history. Uncorrected scale scores for the clinical-abused group showed five elevations above a clinically significant T-score of 65 across the ten clinical scales. Those who were abused scored significantly higher on the F scale and scales 1, 4, 6, 8, and 0 than those who were not abused (Nash et al., 1993). This research indicates that the elevations in MMPI-2 profiles of patients with BPD may be accounted for in part by childhood sexual abuse history.

The MMPI-2 has also been used in post traumatic stress research, which has focused on the Supplementary Scales (e.g. Litz et al., 1991; Miller, Goldberg, & Streiner, 1995). A study comparing veterans with PTSD, veterans without PTSD, patients with substance abuse disorder and non-veteran controls used both the MMPI and the MMPI-2 (Litz et al., 1991). This study found that the MMPI and MMPI-2 post traumatic stress disorder scales, PK and PS, were highly correlated. The study also found that PTSD was accurately identified from other groups using the PK and PS scales (Litz et al., 1991).

The PK and PS scales have also been found to point to the presence of PTSD in patients with anxiety disorders (Miller et al., 1995). These authors compared samples from two outpatient treatment programs—one treating anxiety disorders and one targeting psychiatric and medical sequelae of traffic accidents. Six of the traffic

accident group had a diagnosis of PTSD, compared to one of the anxiety disorders group. Results found that anxiety disorder subjects were higher on most MMPI-2 scales, including the F, Fb, PK, and PS scales. The mean PK and PS T-scores were 65.6 and 69.0 respectively for the anxiety disorders group, and 61.6 and 62.9 respectively for the traffic accidents group. No sex differences were found in the PK and PS scales (Miller et al., 1995). Therefore, the MMPI-2-PK and PS scales can also be useful in detecting PTSD in trauma victims.

The literature reviewed above illustrates the usefulness of the MMPI and MMPI-2 in providing a picture of adult personality functioning in a clinical context. The literature also shows that the MMPI can be used to accurately differentiate BPD from other disorders (Brems, 1991); distinguish between women who have been abused in childhood from those who have not (Nash et al., 1993); distinguish PTSD in veterans (Litz et al., 1991); and direct the clinician to consider diagnosis of PTSD in people with anxiety disorders (Miller et al., 1995).

If the MMPI-2 is viewed as a structured or subjective measure of personality, then its complement is an unstructured or projective measure of personality. The most common projective measure of personality is the Rorschach Test (Groth-Marnat, 1990). Weiner, one of the most experienced Rorschach clinicians, suggests that the MMPI-2 and the Rorschach test can be effectively used together (Weiner, 1993). The MMPI-2 and the Rorschach are complementary in terms of accessing different levels of personality with respect to how the person decides to respond to each stimulus. They also aid in forming broad-based conclusions with regard to personality functioning and coping style and efficacy across a range of potential situations (Weiner, 1993). In clinical research it is also useful to use both the Rorschach Test

and the MMPI-2 to assess personality functioning as broadly as possible, particularly considering that most clinical research involves a short amount of time spent with each subject. Using both the MMPI-2 and the Rorschach Test can maximise information gathered about each individual.

#### 2.4.6.2 Rorschach Inkblot Test.

The Rorschach Test is one of the oldest tools of clinical personality assessment, having been developed by Herman Rorschach in 1921. The test consists of 10 inkblots— five with colour and five without— which the person is asked to simply state what it looks like to them. According to Groth-Marnat, the assumption behind the test is that the way people respond to the blots reflects the way they respond to ambiguous situations which require a degree of organisation and judgement (Groth-Marnat, 1990). The responses themselves are claimed to reflect the way the person's "needs, motives, conflicts and certain perceptual 'sets'" influence the degree of cognitive and emotional organisation of the person at the time (Groth-Marnat, 1990, p. 275).

The Rorschach Test has a range of scoring methods. The Exner Comprehensive System has been developed over the last 20 years, and is based on extensive normative data (Exner, 1993b). The Exner system also incorporates the most frequently used scorings and interpretations from other systems (Groth-Marnat, 1990).

The Rorschach Test has been used extensively in clinical research, so much so that Weiner has suggested guidelines for its use (Weiner, 1995). According to Weiner, research projects using small samples should restrict quantitative Rorschach material to only a few carefully selected variables in order to reduce Type I error

through overuse of statistical testing. This restricts the effect of significant results occurring by chance through the use of a large number of variables. Weiner also stresses the need for inter-scorer agreement to increase reliability of the study, and the use of reliable categories that have been based on clinical use or prior research (1995).

Weiner also cautions that Rorschach data, particularly from small samples or clinical research, should not be statistically compared to normative data. This is because of the differences in sample size and composition, which may result in misleading or distorted results of statistical analysis (Weiner, 1995).

The creator of the Comprehensive System, John Exner, has used the Rorschach Test in research with patients with BPD (Exner, 1986). This research compared 84 patients with BPD (49 women and 35 men) with 76 patients with schizotypal personality disorder (44 males and 32 females) and 80 patients with schizophrenia (half men). The research found that the Rorschach Test successfully distinguished between BPD patients and the other two groups.

Some of the pertinent differences between groups accurately reflect the phenomenology of BPD (Exner, 1986). According to Exner, the Adjusted D score is the “best direct single Rorschach index of the ability to maintain control under demand or stress situations” (Exner, 1993b, p. 371). A significant finding in the research was that the Adjusted D score, which is adjusted to remove the effect of situational stress, was consistently below zero for a large proportion of the BPD group (1986). According to Exner, scores below zero on the Adjusted D for BPD patients reflect immaturity or deterioration in psychological development.

Another aspect of BPD is the difficulty many patients with the disorder have in controlling their emotional outbursts, which often results in impulsive behaviour. The capacity for affective control is measured on the Rorschach by the  $FC : CF + C$  ratio, with the assumption that people who are more able to control their emotional outbursts will respond to the cards in a more structured or “form” based manner. Those who are less able to control their emotional expression will be more inclined to respond to the colour rather than the shape first. Exner’s research found that those with BPD scored significantly higher on the right hand side of the equation, reflecting a dominance of colour based responses (Exner, 1986). He concluded this result reflected the problems of control that many people diagnosed with BPD experience through lack of emotional modulation (Exner, 1986).

Exner's research also found that BPD patients were more likely than patients with schizotypal personality disorder or schizophrenia to operate in an extratensive manner (1986). The Comprehensive System includes the Erlebnistypus (EB) score, first formulated by Rorschach, which categorises people as introversive, extratensive or ambitent (Exner, 1993b). The EB is based on the ratio of movement answers to the sum of weighted colour answers, or  $M : WSumC$ . The ratio describes the way that a person uses his or her resources, rather than describing a behavioural orientation such as the Jungian concept of introversion versus extroversion.

When the EB is weighted on the movement side it reflects a tendency for the person to “use their inner life for basic gratifications”, and is the introversive style (Exner, 1993b, p. 409). When the balance fails to indicate a distinctive coping style, the person is classified as “ambitent”. The ambitent classification describes people whose emotions have an inconsistent effect on their basic day-to-day experience, such

as thinking, problem solving and decision making. The impact of feelings on these areas may be strong in one situation and absent in another. The extratensive orientation is where the ratio is weighted on the colour side, and reflects the person's use of "interactions between themselves and their world for gratification of their more basic needs" (Exner, 1993b, p. 410). Exner's (1986) research found that 80% of the BPD sample had an extratensive orientation.

The research by Exner has illustrated that the Rorschach can be used to describe the personality dynamics of patients with BPD. A review of literature using the Rorschach Test with BPD patients has confirmed Exner's 1986 findings (Gartner et al., 1989). Gartner and his colleagues concluded that BPD patients have been shown to produce similar Rorschach protocols across a number of research papers. The review also found that there was evidence of disturbed object relations on the protocols, reflected in responses containing primitive defenses, aggressive and morbid content (Gartner et al., 1989).

The Rorschach Test has been used in research investigating childhood sexual abuse and BPD (Saunders, 1991). This research compared 62 women diagnosed with BPD, 33 of who had experienced childhood sexual abuse. The Rorschach protocols were scored using a range of scores from different systems, and two that were specifically formulated for the research to assess dissociation and psychodynamic patterns of trauma experience (Saunders, 1991).

The research found seven of the eight Rorschach variables were significantly different for those with childhood sexual abuse compared with those without such a history (Saunders, 1991). Those with a history of childhood sexual abuse were found to have higher CF + C, more cumulative anatomy, blood and sex content scores,

more responses containing aggression, more confabulated responses and more atypical movement than those without a childhood abuse history. Saunders concluded that projective tests such as the Rorschach Test could be used to detect a history of sexual abuse in BPD patients. Saunders also suggested that her results might reflect a subgroup of people diagnosed with BPD who had a history of childhood sexual abuse, and also had PTSD in adulthood (1991).

However, there were some flaws in Saunders' research that confuse the findings regarding Rorschach protocols of patients with BPD and childhood trauma history (Saunders, 1991). Childhood trauma history was identified from hospital records rather than interview, and therefore does not take into account those who had not disclosed, or who were amnesic to the events. The sample had also suffered significant traumas other than sexual; for example, 11 of the 29 patients in the comparison group had suffered physical abuse, and four had witnessed violence. These issues call into question the efficacy of distinguishing one type of trauma from another, particularly when information is not directly elicited from the participant.

A study by Nash and his colleagues also compared women who had a history of childhood sexual abuse with those who did not (Nash et al., 1993). This study sought volunteers with and without childhood sexual abuse histories. Diagnostic data for the sample of 105 was not reported, and so the proportion of the sample that may have met criteria for BPD is not known. However, the study administered the Rorschach and used Exner's Comprehensive System and found that those who had been abused showed more pathology on the Self-Perception index of scores. These results suggested increased bodily concerns, shown by elevated anatomy, x-ray and morbid responses; a damaged sense of self, illustrated by the number of morbid

scores; and painful self introspection, shown by high Form-Dimension (FD) and Vista scores (Nash et al., 1993). These results show that people who have suffered sexual abuse in childhood have a disrupted and distorted sense of self in adulthood.

Rather than focusing on childhood sexual abuse specifically, research using the Rorschach Test has found that it may be useful in detecting traumatic loss in general (Cerney, 1990). Using the definition that traumatic loss is “any experience that involved an assault on an individual’s sense of integrity and self worth”; Cerney started with the Rorschach protocols rather than with a traumatised sample (Cerney, 1990, p. 782). Three people classified 48 protocols; five of which were from patients with schizophrenia and the rest from patients with BPD. No conclusion was reached for six protocols, which were set aside, leaving 36 protocols in the data set.

The remaining 36 protocols were found to have some type of trauma (Cerney, 1990). The trauma was reflected in responses either dominated by colour and aggression or noted for the absence of these types of responses. The 'all-or-nothing' approach to aggression and colour responses was based on results of a pilot study by the same researchers, and reflects either withdrawal and shutting down from the traumatic material., or becoming overwhelmed by it and having the emotions re-activated by the stimulus (Cerney, 1990). This is the two-way effect of PTSD. Although DSM-IV states that to meet criteria for diagnosis of PTSD the patient must experience symptoms from both the overwhelming and numbing categories (APA, 1994), it seems that some patients experience a dominance of symptoms from one category over the other.

Thirty-six of the 42 protocols were classified as reflecting traumatic experiences, with ten of these who did not appear to have suffered a trauma from



their hospital records (Cerney, 1990). Two of the ten were later found to have recovered memory of sexual abuse in the context of psychotherapy. Further data were not available on the other eight people. Cerney concluded that the Rorschach can detect traumatic loss, but awaits results of a validation study to support this conclusion (Cerney, 1990).

The Rorschach Test has also been used to investigate trauma in Vietnam veterans (van der Kolk & Ducey, 1989). This study successfully distinguished between Vietnam veterans with and without Post Traumatic Stress Disorder. Specifically, Rorschach results showed an "unmodified reliving of the traumatic material, and revealed the biphasic cognitive processing of traumatic experiences of rigidly defended, affective numbing versus overwhelmed intrusive reliving" (van der Kolk & Ducey, 1989, p. 259). The Comprehensive System scores used in this research were the EB and the ratio of  $FC : CF + C$ , and were weighted on the colour dominant side. These scores have been described extensively above, and are common scores for use in research focusing both on trauma and on the dynamics of BPD.

It can be seen from current literature that the Rorschach Test is useful in assessing the structure and dynamics of BPD and the associated childhood trauma history that many BPD patients report. The main focus of the Comprehensive System is on colour versus form-dominated responses, movement versus colour responses (EB), and the scores related to stress and emotional modulation (Adjusted D). In research using the Rorschach Test and small sample sizes it is necessary to restrict the number of variables studied (Weiner, 1995). The variables of EB,  $FC : CF + C$  and Adjusted D have been tested in previous research and found to be useful for investigating trauma and BPD.

It is important for comparison with past and future research that Rorschach research be of a standardized nature, using a well-researched system of scoring and interpretation. The Comprehensive System (Exner, 1993b) has been based on extensive research and is, as its name suggests, comprehensive.

#### 2.4.7 Methodological considerations.

The body of research provides strong evidence for the premise that patients diagnosed with BPD have suffered a range of traumatic experiences. The body of research also provides evidence that the effects of traumatic experience in contribute to the clinical presentations of people diagnosed with BPD and profiles on standardised personality measures such as the MMPI-2 (Gartner et al., 1989; Gandolfo et al., 1991). The concept of the additive effect of traumatic experiences, or cumulative trauma, is useful in considering BPD. However, patients diagnosed with BPD describe experiences beyond cumulative trauma. They also describe a number of traumatic experiences occurring simultaneously, often in chaotic or unprotective environments. Therefore, their experiences may be thought of as both cumulative and nested: a number of traumatic events occurring over time within the context of other traumatic events.

The concepts of cumulative and nested trauma are important in considering how best to investigate BPD scientifically. Although comprehensive, the body of research regarding childhood trauma history and BPD has tended to employ quasi-experimental and experimental within group and between group designs, prompting reporting of quantitative data (e.g., Guzder et al, 1996; Shearer 1994; Herman et al, 1989). The concepts of cumulative and nested trauma imply that the complexity of the disorder may not be best illuminated using quantitative methods alone. The

process of adding traumas and averaging them to obtain group data can result in a loss of meaning for the individual. Thorngate (1986) provided a reminder that “To find out what people do in general, we must first discover what each person does in particular and then determine what, if anything, these particulars have in common” (Thorngate, 1986; p. 75).

The complexity of BPD and the range of trauma experiences reported by many participants of group research projects warrant a more intensive approach to flesh out the individual picture. An intensive approach utilises a large amount of data with a small number of participants (Chasen, 1979). A combination of group data and multiple single case analysis is one such innovative methodology that is deemed appropriate to address the complexity that is BPD. Case studies also contribute to research through addressing individual difference and complexity (Barker, Pistrag, & Elliot, 1994). Although combinations of group and multiple single case analysis are uncommon, such combinations “appear promising and deserve systematic exploration” (Hillard, 1993).

Henry, Schacht, and Strupp (1986) carried out one study employing both group and single case methodology. These authors studied the first 15-20 minutes of psychotherapy sessions for eight young men to investigate therapist-client interaction. The first 150 ‘thought units’ - speech portions representative of one complete thought - were recorded from the third session to the end of therapy, not more than 25 sessions. The MMPI was also used as an outcome measure in pre- and post-test design. This data set therefore allowed intra- and inter-individual analysis and allowed conclusions to be made about the individual and the group. Actual findings of the research are not pertinent to the current research. However, the authors concluded

that the methodology employed of combining individual and group data analysis in a small sample can provide complex and extensive information about particular phenomenon (Henry et al., 1986).

Three categories of case study methodology in clinical psychology research have been identified (Hillard, 1993). The first two involve quantitative data: the first with direct manipulation of the independent variable, and the second involving multiple observations over time. The third category of case study identified by Hillard (1993) involves qualitative or categorical data gathered from essentially passive-observational means. Interview data would fit into the category of passive-observational data as minimal manipulation of the subject takes place. This type of case study has been employed in clinical psychology since the time of Freud (Richards, 1979).

Quantitative research also operates in a deductive format, using data to investigate specific pre-determined hypotheses. Results from quantitative analysis can be taken further and used in inductive research to generate hypotheses about case material. These post-hypotheses can then be investigated using qualitative approaches such as negative case analysis.

Negative case analysis involves the analysis of data for the purpose of refuting hypotheses (Judd, Smith & Kidder, 1991). Negative case analysis entails systematic searching of case material to find instances that deviate from the hypothesis. In this way negative case analysis is more demanding than quantitative analysis, as any deviation from the hypothesis is not tolerated (Judd et al., 1991). Qualitative research using negative case analysis to generate hypotheses from case material would contribute to the body of existing research and generate directions for future research.

This combination of quantitative and qualitative research may be particularly useful in teasing out factors that contribute to the clinical presentation of adults diagnosed with BPD. A combination of group analysis and multiple individual case analysis may also support efforts to ensure validity of results for both group and individual data and address concerns of generalisability of findings which are of importance in small N and single case research. Research in this vein can also allow future replication to extend generalisability beyond the initial sample. This combination was adopted in the research described in this thesis.

## 2.5 Conclusion and Aims

Review of research literature investigating the development and phenomenology of BPD indicates that research orientations have thus far come from both a dissociative (Zweig-Frank et al., 1994; Shearer, 1994) and trauma framework (Guzder et al., 1996; Herman et al., 1989).

From this review of the current literature it can be concluded, in the very least, that: people diagnosed with BPD have suffered significant childhood trauma (e.g., Herman et al., 1989; Becker et al., 1995), and that this trauma is associated with dissociative symptoms in adulthood (Shearer, 1994; Zweig-Frank et al., 1994). These findings have been established using well-tested methodological approaches to investigation of BPD.

The methodological approaches used in the research include the measure of dissociation using the Dissociative Experiences Scale (Carlson & Putnam, 1993; Bernstein & Putnam, 1986); a semi-structured interview schedule developed by van der Kolk and his colleagues for eliciting history of trauma—the Traumatic Antecedents Interview (TAI)—which has been used in a number of research projects

(e.g. Herman et al., 1989; Saxe et al., 1993; van der Kolk & Ducey, 1989); and profiles of BPD using standardized clinical personality measures such as the MMPI-2 (Gandolfo et al., 1991; Gartner et al., 1989) and the Rorschach Test (Exner, 1986; Zalewski & Robert, 1991).

Many of the studies reviewed report all data in group format, making it difficult to elicit a sense of the individual and the cumulative and nested effect of their childhood experiences on adult psychopathology. Although it has been suggested that BPD is a consequence of childhood trauma and may be better represented by the diagnosis of "Complex Post Traumatic Stress Disorder" (Herman, 1992, p. 121), the specific phenomenology of childhood trauma in a developmental context leading to adult personality fragmentation has not been investigated.

The aim of the current research is to explore the effect of childhood trauma on personality development, through eliciting childhood trauma history and the measurement of dissociation and adult personality profile using the methodological path set in the literature. Complexity of people's experience is of paramount importance in this research, and thus case studies will also be included. These methods aim to explore the effect of cumulative and "nested" trauma on the development of personality in people diagnosed with BPD.

### 2.5.1 Hypotheses

The hypotheses for the research therefore are:

1. Adults diagnosed with BPD have a history of childhood trauma.
2. Adults diagnosed with BPD have dissociative and posttraumatic stress symptomatology.

3. There is a consistency of personality structure among adults diagnosed with BPD as measured by the MMPI-2 and Rorschach Test.
4. Severity of childhood trauma history will be positively related to dissociation, post traumatic stress symptomatology, and severity of MMPI-2 clinical profile.

## CHAPTER 3

### METHOD

#### 3.1 Participants

Participants were 12 women-11 of Anglo Saxon origin, and one of Greek-German extraction-between the ages of 22 and 40 years, ( $M = 32.8$ ,  $SD = 6.8$ ). All women were diagnosed with BPD by their treating clinician from the Western Healthcare Network or Victoria University Psychology Clinic. This diagnosis was confirmed using criteria for BPD according to DSM-IV in the initial stages of recruitment. A DSM-IV BPD checklist was developed according to DSM-IV criteria (see Appendix I) and was completed by case managers (in the case of clients of the Western Healthcare Network) or the treating psychotherapist-a trainee clinical psychologist-(in the case of the Victoria University Psychology Clinic).

The results of two participants (17%) were not included in the analysis. One participant did not meet the criteria for BPD, the other had a borderline IQ, and the extent of her understanding of the process was uncertain. She completed the TAI, DES and MMPI-2, and the pencil and paper measures took significantly longer than for other participants. The MMPI-2 profile was invalid according to the validity scales ( $T$ ,  $F$  and  $K$ ), and the VRIN scale was in the extreme range, indicating the tendency for variable responses (VRIN  $T=110$ ). Although all participants' profiles were invalid according to the validity scales, the VRIN and TRIN scales were in the



normal range, and therefore suggest validity scale scores can be interpreted clinically (Hathaway & McKinley, 1991).

### 3.2 Measures

#### 3.2.1 Traumatic Antecedents Interview (TAI)

The TAI is a 100 item semi-structured interview schedule, which covers three aspects of trauma: physical abuse, sexual abuse and witnessing domestic violence; and four aspects of disrupted attachment: physical neglect, emotional neglect, family chaos and significant separation from primary care givers (see Appendix II) (van der Kolk, Perry & Herman, 1991; Herman, Perry & van der Kolk, 1989). Interviewees are encouraged to narrate their experiences in detail rather than simply providing yes or no answers. These categories of trauma and of disrupted attachment are scored once for the presence of the problem during each of three developmental ages: early childhood (0-6), latency (7-12) and adolescence (13-18). Additional scores are given in each group for the presence of abuse by multiple perpetrators, although multiple incidence of abuse is not scored more than once. Thus a trauma score can range from zero (no trauma) to nine or above (trauma in all three categories in each age group with one or more perpetrators). Attachment scores range from zero (no attachment disruption) to 12 or above (attachment disruption in all age categories with one perpetrator). Attachment and trauma scores can be added to gain an overall score of childhood trauma history. The TAI rating guidelines, which details scoring criteria, include five case studies as examples to aid in scoring (Perry, Herman & van der Kolk, 1992).

Edited scoring criteria for the TAI are provided in Appendix III.

#### 3.2.1.1 Efforts to Ensure Reliability of Scoring

The TAI is retrospective data and therefore reliability is subject to participants' memories. To minimise further threats to reliability from scoring anomalies, each TAI was scored twice. As well as the researcher, a trained rater who was blind to the research questions scored the TAI's. The two raters discussed discrepancies in scores and reached agreement.

#### 3.2.2. Dissociative Experiences Scale (DES)

The DES is a 28 item self-report measure of experience of dissociative states (see Appendix IV) (Carlson & Putman, 1993). Scoring of frequency of experience occurred by placing a mark on a visual analogue scale, from 0% (none of the time) to 100% (all of the time). A total DES score was obtained by calculating the mean of all item scores to give a measure of the frequency of dissociative experiences in a patient's life.

Examples of items include 'Some people have the experience of driving a car and suddenly realising that they don't remember what happened during all or part of the trip. Circle a number to show what percentage of the time this happens to you', and 'Some people find that they have no memory for some important events in their lives (for example, a wedding or graduation). Circle a number to show what percentage of the time this happens to you'.

The DES has test-retest reliability of 0.84 after four to eight weeks and has discriminated patients with multiple personality disorder (currently known in DSM-IV as Dissociative Identity Disorder (DID)) from several non-dissociative clinical patient

groups as well as from normal controls (Carlson & Putman, 1993). Reliability was found to be adequate for this sample (Cronbach's Alpha = 0.88).

### 3.2.3. Minnesota Multiphasic Personality Inventory-2 (MMPI-2)

The MMPI-2 has 567 true or false questions that assess the current emotional state of the person, as well as their attitude to test taking (Groth-Marnat, 1990).

The MMPI-2 protocol is scored using templates assessing answers to specific questions for each of a number of scales. The raw score of each scale is the number of questions marked which match those on the scale. Raw scores are plotted onto a profile and converted to standardized T-scores. Standardized scores can then be compared across scales and protocols. The scales used in this study were the Basic Scales and three extra validity scales: VRIN, TRIN and Fb.

It is possible to ascertain the current level of psychological distress a person may be experiencing, as well as determining basic personality traits, with this measure. A measure of severity of psychological distress is provided by calculating the number of elevations above a clinically significant T-score of 65 on the clinical scales.

#### 3.2.3.1 Post Traumatic Stress Disorder Scales (MMPI-2 - PK and PS)

The PK (Keane, Malloy, & Fairbank, 1984) and PS (Schlenger & Kulka, 1987 in Hathaway & McKinley, 1991) scales are made up of 49 and 60 MMPI-2 items respectively. The 60-item PS scale includes the 49 items of the PK scale.

Test-retest reliability for the PS scale has been reported at 0.92 for males and 0.88 for females, and the PK scale at 0.8686 for males and 0.89 for females (Graham,

1990). Taken together the two scales are thought to reliably identify people with symptoms of post traumatic stress, particularly anxiety, mood fluctuation, unwanted or intrusive thoughts, and sleep disturbance (Hathaway & McKinley, 1991).

#### 3.2.4. Rorschach Test

The Rorschach Test consists of ten cards on which inkblots have been printed. Five blots are coloured and five are achromatic. The cards are presented to the participant with the instruction "What might this be?". Participants are asked to respond, and are encouraged that "Most people see more than one thing". No other instruction or encouragement is given. The examiner takes down the responses verbatim.

The Rorschach Test can be scored on various quantitative formulas and ratios using the Exner Comprehensive System (Exner, 1986). The formulas chosen for study in the present research were based upon previous research using the Rorschach with people diagnosed with BPD (Exner, 1986) and PTSD (van der Kolk & Ducey, 1989).

#### Adjusted D

The Adjusted D formula is based on the relationship between the Experience Actual (EA) formula and the adjusted Experienced Stimulation (Adjusted es) formula. The Adjusted D formula has been adjusted to remove elements that are related to situational phenomena and includes only one shading and one inanimate movement response. The Adjusted D is therefore the sum of all human movement and weighted colour responses (the EA) and one inanimate movement and one shading response

(adjusted es). The raw Adjusted D formula is then converted to a standard score, with a range of +5 to -5.

According to Exner, the Adjusted D formula is the “best direct single Rorschach index of the ability to maintain control under demand or stress situations” (Exner, 1993b, p. 371). The Adjusted D formula provides a measure of the capacity to tolerate stress, with zero being the midpoint between increasing stress tolerance (positive scores) and decreasing stress tolerance (negative scores). According to Exner, an Adjusted D below 0 reflects immaturity or deterioration in psychological development (Exner, 1986).

#### FC : CF + C

The FC : CF + C ratio compares the number of form-based colour responses to the number of responses in which colour is responded to first. This ratio measures the capacity for affective control.

#### Erlebnistypus (EB)(M : WSum C)

The Erlebnistypus is the ratio of human movement responses to the number of colour responses. The number of colour responses is weighted to reflect their significance in response style. For example, colour-only responses have three times the weight of form-colour responses. Colour-only responses reflect an uncontained response in comparison to a form-colour response, where the shape of the blot is responded to first. Form-colour responses include "a blue spider", while colour only responses include "It's all blood".

The Erlebnistypus (EB) ratio categorises people as introversive, extratensive or ambivalent (Exner, 1993b). The ratio describes the way that a person uses his or her

resources. When the ratio is weighted by 1.5 times or more on the movement side it reflects a tendency for the person to “use their inner life for basic gratifications”, and is referred to as the introversive style (Exner, 1993b, p. 409). When the balance fails to indicate a distinctive coping style, the person is classified as “ambitent”. The ambitent classification describes people whose emotions have an inconsistent effect on their basic day-to-day experience, such as thinking, problem solving and decision making. The impact of feelings on these areas may be strong in one situation and absent in another.

The researcher and a doctoral student of clinical psychology scored the Rorschach protocols to provide inter-rater agreement. The raters had been trained in Rorschach administration and scoring, and had two and a half years of supervised experience with the Exner Comprehensive System. Protocols were scored separately, then differences were discussed, and agreement on scoring was reached. The ratios and formulas for all valid protocols were then calculated using the Rorschach Interpretation Assistance Program (Exner, 1990).

### 3.3 Procedure

Research approval was sought from the Research Committee of the Western Healthcare Network. Approval was granted, after some amendments. The Ethics Committee granted ethics approval for the Western Healthcare Network (see Appendix V). The Victoria University Ethics Committee granted approval for the research (see Appendix VI).

### 3.3.1 Methods of Recruitment

The researcher and supervisor attended staff meetings at three Community Mental Health Centres in the Western Healthcare Network where the study and its procedures were explained and questions were answered. Individual appointments were made with clinicians after six months in order to increase the rate of referrals. The researcher explained the study directly to clinicians at the Victoria University Psychology Clinic.

Clinicians provided suitable participants with a letter of introduction to the research (see Appendix VII). The letter explained the aims of the research and included details of the procedure and how to contact the researcher. Consenting participants were contacted and an appointment made. This occurred at their local Community Mental Health Centre or, for clients of the Clinic, the Victoria University Psychology Clinic.

### 3.3.2 Data Collection

The research process was explained both verbally and in writing using the Plain Language Statement (see Appendix VIII). Participants were then asked to sign an informed consent form (see Appendix IX). The participant was reminded that their consent could be withdrawn at any time and for any reason. The results of the MMPI-2 were made available, with permission, to the clinician ( $n = 5$ ). Some participants requested personal feedback without the involvement of the clinician.

Two sessions took place. In the first session participants completed the DES (Carlson & Putman, 1993) and MMPI-2. The second session was arranged within a week of the first session. Participants were reminded that they could withdraw their

consent at any time if they wished, and also that they could have a break during the session if they wished. The semi-structured interview schedule, the TAI, (van der Kolk et al., 1989) was then administered.

One participant completed both the MMPI-2 and the Rorschach as part of her initial psychological assessment at the Victoria University Psychology Clinic. These valid protocols were completed within 12 months of her participation in the TAI, and with her written permission, were taken from her file to be included in the research.

Five participants completed the Rorschach Test with the researcher—two were recontacted some time after completing the TAI and three were seen the week after completing the TAI. The remaining four participants could not be contacted.

### 3.3.3 Analysis

All participants were allocated a number in order to maintain confidentiality. These numbers were later changed to pseudonyms by the researcher in order to facilitate reporting of case material.

Group data were analysed using descriptive statistics and comparison between means. The hypotheses were tested using single sample *t*-tests. The sample mean was compared to the published means of non-psychiatric populations on the DES (Carlson & Putnam, 1993) and MMPI-2 (Hathaway & McKinley, 1991).

The TAI sample was compared to a theoretical normal population. Although it is unrealistic to expect a normal population to have suffered no trauma at all, it is realistic to expect minimal trauma across the four categories. Therefore the sample TAI category mean was compared to TAI = 1. Minimal trauma, or the experience of only one or two traumatic events, on the TAI may be a score of one for one to two categories. For example, a participant whose father died in childhood would score



one on the TAI. Similarly, a participant who had experienced a one-off incident of sexual molestation would also score one. Experiencing both these events would score two on the TAI. It would be expected that a normal population of 10 participants would have experienced trauma, but not all of the participants would have experienced an event that may be scored positive on the TAI, and therefore  $TAI=1$  represents a population with some, but not severe, trauma history.

A second hypothetical sample was invoked for comparison of results of each category of trauma. Although it may be realistic to expect a hypothetically normal population to have suffered some trauma, it is not realistic to expect a hypothetically normal population to have experienced trauma in all four categories of the TAI. Even a score of one for each category of the TAI would result in an overall trauma score of seven, which reflects considerable trauma. For this reason, mean scores for each category of the TAI were compared to a hypothetically untraumatised population, or  $TAI = 0$ .

The Spearman Rank correlation coefficient was used to test the hypothesis that severity of childhood trauma history will be related to severity of dissociation, post traumatic stress symptomatology and adult personality profile.

Information gathered during administration of the TAI was constructed into case vignettes. The TAI is a history of childhood trauma experiences, and also has information regarding self-harm, present coping resources, and present and past relationships. In this way the TAI can be seen as a clinical history or life-story document. Information from the TAI was therefore constructed into case studies following the pattern set by life-story research (Plummer, 1995). Plummer (1995) has suggested that the author "come to really grasp [the participant's words] from the

inside, and then turn it... into a structured and coherent statement that uses the participants' words in places and the social scientists' in others, but does not lose their authentic meaning" (p. 60). This procedure was followed as closely as possible in the present research. The format for the case studies followed that of the TAI. Therefore they follow a format clustered around trauma experience rather than chronology. This method of writing case studies is useful for situations of cumulative and nested trauma where there is an atmosphere of trauma and neglect punctuated by extreme trauma events such as sexual abuse

Statistical analysis of group data was used to generate questions for qualitative analysis. The questions were investigated by referring to individual cases using the process of negative case analysis—finding instances that disprove rather than prove the hypothesis—to generate further hypotheses (Judd et al., 1991). Although case studies can include quantitative material such as test scores and protocols (McEwen & Karlan, 1990), only data from the TAI was included in the present research for reasons of clarity and to keep a focus on participants' experience.

The diversity of data analysis was chosen to maintain a phenomenological and experiential approach, to maximise the complexity of the data, and to maintain a focus on individual experience.

## CHAPTER 4

### RESULTS

#### 4.1 Preliminary Results: TAI scoring and reliability

During discussions between the two raters it became evident that the scoring criteria often did not accurately reflect the severity of the participants' experience. For example, a single episode of sexual abuse by a stranger at age eight is scored equally to systematic, long-term sexual abuse by a parent between the ages of seven and 12. The scoring criteria also made no attempt to provide guidelines on relating continuous, ongoing physical or sexual abuse to possible neglect by a non-offending spouse.

##### A. Abuse.

When rating the presence of physical abuse, there was difficulty in discerning when culturally acceptable punishment became physically abusive. The scoring criteria for the TAI stipulate that beating with a fist or object is physical abuse, but beating with a strap or a cane twice a week can be seen as culturally acceptable punishment, particularly considering that the experiences occurred up to 20 or more years ago. One participant referred to a parent who punished through scolding, yelling, spanking, occasionally hitting with a ruler or belt and withholding privileges. These incidents, which occurred several times a week, were described clearly as punishments rather than gratuitous events. According to the scoring criteria, these incidents would be considered culturally acceptable punishment because the parent was not out of control and they were in response to breaches of rules. However, the

participant reported that there were times when she could not tell what was right or wrong, and seemed unable to do anything right. This regime then appeared to be very abusive in that the lack of consistency resulted in extreme uncertainty for the participant and meant that she could not know what actions would and would not be punished. On this basis the events described were scored as physical abuse in the current research.

Violence between siblings was also difficult to score for physical abuse. The scoring criteria suggest that inter-sibling violence not be scored. However, the case-study examples that illustrate the scoring criteria include a situation where sibling violence was scored as physical abuse. This case was one where a boy was tied up and physically and sexually abused by his older sisters, and therefore the relationship involved a clear power differential in terms of age and strength. In the present study, sibling conflicts were similarly scored as physical abuse if the relationship between the siblings was uneven with regard to power. For example, her brother regularly beat one participant (number one). This was scored as physical abuse because he was abusing her sexually and emotionally at the same time.

Another scoring difficulty arose when a participant described that her life had been seriously threatened by a stranger at 18. This event was not scored at all, despite it being traumatic and occurring within the age range of adolescence. As the incident did not involve any physical harm to the participant, it was not scored for physical abuse; and as it was not domestic violence, it was not scored for witnessing domestic violence. The category of witnessing violence is clearly intended to focus on domestic violence, particularly as the rater is directed to questions regarding family alcoholism and violence within the family in scoring (Perry et al., 1992). This example illustrated

that the TAI may put too much emphasis on childhood experiences within the family, and not account for "random" acts of physical violence.

Discussion revealed further difficulties with the scoring criteria for witnessing domestic violence. Any violent event that was not directly witnessed by the participant was not scored. This criterion does not include any traumatic effect of hearing about violent events; for example, a brother telling a sister that he saw his brother threaten their mother with a shotgun, as happened to one participant. (The brother was very violent and was eventually imprisoned, so his threat against his mother may not have been an idle one.) The case study examples included in the scoring criteria related an incident where a participant was told that her father had pushed her pregnant mother down the stairs. The participant did not witness her father involved in actual violence, despite considerable threats, including threats with loaded guns. This example scored zero for witnessed violence because violent incidents were heard about rather than directly witnessed by the participant. However, hearing about these events would be expected to have a traumatic effect on the child. In accordance with the criteria, violent events that were not witnessed were not scored in the present research.

The scoring criteria for the TAI are based on allocating one point for the presence of the traumatic experience—regardless of how many times it occurred by the same perpetrator in the same age group— and one point for each perpetrator of the abuse in each age group. Therefore, a child who was repeatedly sexually abused by her father between the ages of seven and 12 has the same score as a child who was molested once by a basketball coach when she was 10 years old. A child who was molested once by a basketball coach and once by an uncle in the same age range

could score higher than the child who has been repeatedly sexually abused three times a week by her father for three years. This discrepancy was not discussed in case study examples.

Scoring once for each perpetrator became difficult in the situation where a participant violently and repeatedly fought with her siblings. Was this witnessing violence? How many instances or perpetrators should be scored? The author's caution in the TAI scoring criteria to remain conservative was followed in the present study, and this situation was not scored (Perry et al, 1992). Again, case study examples did not include incidents such as these.

Difficulties in scoring arise when the victim becomes a perpetrator of abuse. Is this witnessing violence as well? It stands to reason that a victim who has become a perpetrator would find sexually abusing others a traumatic experience. Although this situation occurred in the case study examples, where one participant beat up a woman in a bar because she had picked on him, there was no discussion of the victim-becomes-perpetrator dynamic. Again, these situations were not scored in the current study, but raise questions regarding the difficulty of obtaining an objective measure of severity of trauma from subjective self report. Such situations also raise the difficulty with the subsequent attempt to impose a hierarchy of severity on the reported experiences.

### B. Neglect.

The main issues with scoring for physical neglect regarded whether the failure to protect a child from abuse constituted physical neglect. It is generally assumed that it is the parent's role to protect their child. So, by definition, it would appear to follow that if the abuse occurred, neglect has also occurred.

Again, there was a difference between the scoring criteria of the TAI and the case study examples. Scoring criteria suggest physical neglect by mother if father was beating the child. The case study examples were confusing on this point. One case study showed a mother not scored for physical neglect where her husband physically abused their daughter by spanking, hitting, punching, kicking (including in the vaginal area), and throwing her across the room. However, the mother in this case was scored for physical neglect due to her illness interfering with the provision of basic physical care. Another case study described a mother who provided for the physical needs of her child, but did not intervene to stop physical abuse of her child by her husband. This case was scored for physical neglect for failure to protect. The authors stated that if the mother had tried to intervene and been unsuccessful she would not have been scored positive for physical neglect.

In the current research, it was decided to score neglect for failure to intervene in physical abuse by a spouse on a case by case basis. For example, where a mother was clearly aware that her husband was physically abusive to her children by beating them up, she was scored as a perpetrator of physical neglect for failing to protect her child. If there were situations where it was not certain that the mother knew about the abuse it was scored negative. This happened, for example, where violence and coercion were involved in the sexual abuse of a participant by her uncle. The sexual abuse occurred outside the immediate family, and the parents' knowledge of it was unclear.

A situation where both parents were scored as perpetrators of physical neglect occurred when a father said his daughter was faking her epileptic seizures and did not

allow her any medical treatment. The mother was also scored for physical neglect in this case for failing to get medical attention for her child.

The role of the abusing parent as caregiver was also not elicited in the scoring criteria, case study examples, or the TAI itself. Questions were raised regarding whether a father who was sexually abusing his daughter was also physically or emotionally neglecting her. While this would seem to be a reasonable assumption, it is possible that he may have been providing significant emotional input in other ways. However, no guidance was provided in the scoring criteria on the relationship between abuse and neglect.

The issue of perpetrators of neglect and failure to protect was also raised in discussions concerning scoring for emotional neglect. Two situations of emotional neglect and failure to protect were discussed. The first situation was where parents were both scored as emotionally neglectful when they both knew that their child was being abused and did not support her throughout the subsequent court case, in fact they invited the perpetrator to their home to celebrate his acquittal. The second situation involved parents in the case of untreated epileptic seizures (see case five: Georgina). This was scored as emotionally abusive because of the emotional ramifications for a young child of untreated epilepsy. After discussion these situations were agreed to be examples of 'gross acts of negligence' mentioned in the scoring criteria (see Appendix III, p. 234).

Although scoring was conservative, instances of gross neglect by non-offending parents overall resulted in increased scores for physical and emotional neglect after inter-scorer discussions. The increased scores reflect the role and responsibility of both parents in the emotional life of the child.



### C. Separation and loss.

The major difficulty with scoring for separation and loss concerned judging the severity of the experience. The scoring criteria do not stipulate a minimum amount of time for a separation, but suggest six weeks. The effect of separation from a primary care giver would vary according to the age of the child. Therefore, a separation of mother from her two or three year old child for two to three weeks was scored positive for separation, but the same duration for an early adolescent was not.

Generally, losses outside the immediate family were not scored positive for loss, as directed by the scoring criteria. There was one exception where a participant had a significant positive relationship with a singing teacher. This teachers' death was scored as a loss for the person primarily because she noted that the teacher's death removed any positive role model in her life. This was in contrast to both scoring criteria and case study examples in the TAI. One case in the scoring criteria examples involved a child who was loved and protected by her paternal grandparents. After their death she was physically abused by her father and made an outcast from the family by not being allowed to eat with the family. The participant was adamant that her grandfather was her primary caregiver. Despite this, his death was not scored as a loss for the participant, resulting in a zero score for separation and loss. It was decided to deviate from scoring criteria in the present research to more accurately reflect the participants' experience of separation and loss in childhood—specifically raising the issue of the importance of protective and positive relationships outside of the immediate family. This deviation may represent a minor compromise to the

reliability and validity of the TAI. However, the result of the scoring was to increase the person's total score by one point to 17: already a high total trauma score.

The case described above where loss was scored for a teacher's death also raised the issue of the loss of family pets. This child was not allowed to have animals, but she managed to tame a wild rabbit. She became very attached to the rabbit, and it was described as one of the very few positive relationships she had in childhood. She was devastated when her father killed the rabbit. This incident was not scored as a loss, as criteria for loss include death of family members only, but this was a traumatic experience all the same.

#### D. Chaos.

The scoring for chaos was problematic in that even a maximum score of three for chaos—one for each developmental period—did not accurately reflect the severity, extent, or experience of chaos in the home as revealed by the narrative of the participants. Despite this, scores for chaos were decreased after inter-rater agreement. One rater assumed that if a father was drunk and sexually abusing his daughter then the situation was chaotic by definition. However, discussion centred on the issue of reliability and predictability, as emphasised in the scoring criteria. It was decided that a person in an otherwise essentially stable home, whose father got drunk and sexually abused her every Saturday night was able to predict her experience. Situations like these were thus not scored positive for chaos.

---

The effect of the scoring anomalies encountered was to lower scores in three cases and increase scores in two cases. Four cases were unchanged. Scores were changed by one or two points in three cases. One case the scores were decreased by five points (this was the participant whose home was not scored as chaotic because she

could predict that her father would get drunk and abuse her every Saturday night as discussed above). The largest discrepancy in scores was one case which was increased by 11 points. This arose from discussions of failure to protect as instances of physical and emotional abuse and is discussed below. The somewhat difficulty of the two raters in reaching agreement reflected the dilemma of providing scoring criteria for complex cases of childhood trauma.

#### 4.2 Demographic Data

Participants were 12 women-11 of Anglo Saxon origin, and one of Greek-German extraction-between the ages of 22 and 40 years, ( $M = 32.8$ ,  $SD = 6.8$ ). Six out of ten participants were single, two were separated, one was divorced and one was married. The participants had completed an average of 12.1 years of education, with half having left school before completing high school (median education 11.0 years). The highest level achieved was the completion of a bachelor's degree. Half the sample had children, between one to three children each. Three participants were working, two part time and one full time. The participant working full time became too ill to continue working within a month of testing, and subsequently lived on a government-provided sickness benefit. Seven of the ten participants received government assistance at the time of participation in the research. The median annual income was \$10,000.

Only two participants reported a diagnosed mental illness in their family. One participants' mother had depression which required hospitalisation at times, and one participants' father had depression which did not require hospitalisation but was described as 'episodic' and would prevent him from working. Seven of the ten participants described their fathers as alcoholics. Two of these seven also said their

mothers had problems with alcohol and one said that her brothers were also alcoholics.

Not one participant reported being in excellent physical health. Seven participants had a chronic medical condition, including three with asthma, two with stomach ulcers, one with hormone disorder, and one with rheumatoid arthritis. The two remaining reported their health as fair and poor, respectively, with no specific complaints.

All participants reported that they had engaged in self-injurious behaviour at some point, as shown in Table 1.

Table 1

Frequency and Type of Self-Injurious Behaviour (SIB)

Type of SIB	Frequency (N = 10)
Cutting	9
Burning	3
Hanging	3
Poisoning or overdosing	5
Gunshot	0
Hitting or banging	0

4.3 Quantitative Analysis

4.3.1 Hypothesis 1: People Diagnosed with BPD Will Have A History Of Childhood

Trauma

The participants reported significant childhood trauma. Table 2 shows the frequency of reported trauma.

Table 2

Frequency of trauma (N = 10)

Abuse		Neglect		Separation and Loss		Chaos	
Physical	8	Emotional	9	Separation	9	Chaos	7
Sexual	9	Physical	5	Loss	5		
Witnessing violence	9						

TAI scores ranged from 7 to 24, M = 16.5, SD = 8.8, with a median of 17.0. It can be seen from Table 2 that the participants reported particularly high levels of emotional neglect, sexual abuse, violence in the home, and separations from primary care givers. The TAI sample mean was compared to TAI=1 using a single sample t-test and found to be statistically significant. The single sample t-test revealed that the total trauma results of the present sample were significantly different from a hypothetically normal population (t(9) = 5.6,  $p < .01$ ).

Mean scores from each category of the TAI were compared to TAI=0. Means for each category of the TAI and t-scores for comparison with a hypothetically untraumatised or 'protected' population are presented in Table 3. After Bonferroni adjustment a significance level was set at  $p < .01$  for results of t-tests on TAI data to reduce the possibility of significant results occurring by chance (see Table 3).

Table 3

Descriptive and t statistics for the TAI (N = 10)

TAI Category	<u>M</u>	<u>SD</u>	<u>t</u>
Abuse	6.7	4.3	4.9*
Neglect	5.3	3.1	5.4*
Separation and Loss	2.3	1.5	4.7*
Chaos	2.0	1.4	4.5*
Total	16.3	8.6	5.6#

\*p < .01 for comparison with M = 0

#p < .01 for comparison with M = 1

The total TAI score and scores from all categories were significantly different to the hypothesised sample that had minimal trauma (TAI = 1) for total scores, and no trauma (TAI = 0) for each category. These results confirm that the participants reported significant and severe childhood trauma history.

#### A Abuse

Eight participants reported having experienced physical abuse before the age of 18 years, including having been hit with an object such as a strap for punishment, and having been beaten by a parent for no reason. Nine participants reported sexual abuse before the age of 18 years. The type of sexual abuse varied. For example, one participant was raped once at 16 (participant eight), while others were sexually abused by more than one perpetrator (n = 6). Seven of the participants reported

having witnessed domestic violence before the age of 18, such as seeing their father beat their mother and violence between male siblings. Six participants reported having experienced all three forms of abuse, while two others reported both physical and sexual abuses. Participant four was the only one to report sexual abuse in the context of witnessing violence, and participant nine, only, did not report any form of abuse (see section 4.4.1).

### B Neglect

Five participants reported physical neglect before the age of 18 years. They typically had a mother who was physically or mentally ill, or who had an alcohol problem. Participants also reported that no one in their childhood was affectionate towards them. Only one participant reported no emotional neglect (number two), and four reported emotional but not physical neglect. Participant two's father was an alcoholic and often abusive, while her mother had a chronic physical illness. Despite the difficulties associated with her mother's illness, the participant felt that her mother was able to provide the emotional care and attention she required as a child. (See section 4.4.2). Five of the ten participants reported both emotional and physical neglect as children.

### C Separation And Loss

Nine participants described separations from their primary caregiver at some stage during their childhood, including an eight year old's mother going overseas for three weeks on holiday and another mother travelling from the country to the city for the medical treatment of another child every few months. Participant two reported no separation from her primary care-givers before the age of 16 years.



Five out of the ten participants reported having suffered a significant loss in their life before the age of 18. Losses included the death of a significant family member, for example a parent; however, one participant (number five) lost a music teacher who had been very encouraging of her. This relationship stood out as significantly protective in a very abusive family environment and was therefore counted as a loss. (See section 4.4.3).

Five of the ten participants reported having experienced both loss and separation in childhood. One participant reported having experienced neither separation nor loss (participant two), and four reported separations only. (See section 4.4.2).

### C Chaos

Seven out of the ten participants described family chaos from birth to the age of 18, with one exception. Participant nine reported a chaotic life to the age of 12 due to her mother's alcoholism. The chaos ended after the age of 12 when she was able to look after herself with the help of her sisters (see section 4.4.1). The typical chaotic household was one where one parent was ill or alcoholic, family violence was present, and the child could not rely upon the household for basic physical and emotional needs such as clean clothing, food, protection and affection.

#### 4.3.1.2. TAI Data By Developmental Stage

Table 4 shows the percentage of the sample that reported childhood trauma according to participants' age and TAI category.

Table 4

Percentage of the sample reporting childhood trauma according to age and trauma category (N = 10)

		Age category			
TAI Category		Infancy	Latency	Adolescence	Total
		(0-6 years)	(7-12 years)	(13-18 years)	
Abuse					
	Physical	20	70	60	80
	Sexual	60	70	70	90
	Witnessing violence	40	70	60	90
Neglect					
	Physical	50	50	50	50
	Emotional	90	90	90	90
Separation and Loss					
	Separation	30	60	70	90
	Loss	10	30	10	50
Chaos	Chaos	70	70	60	70
Total		100	100	100	100

These results are shown graphically in Figure 1.

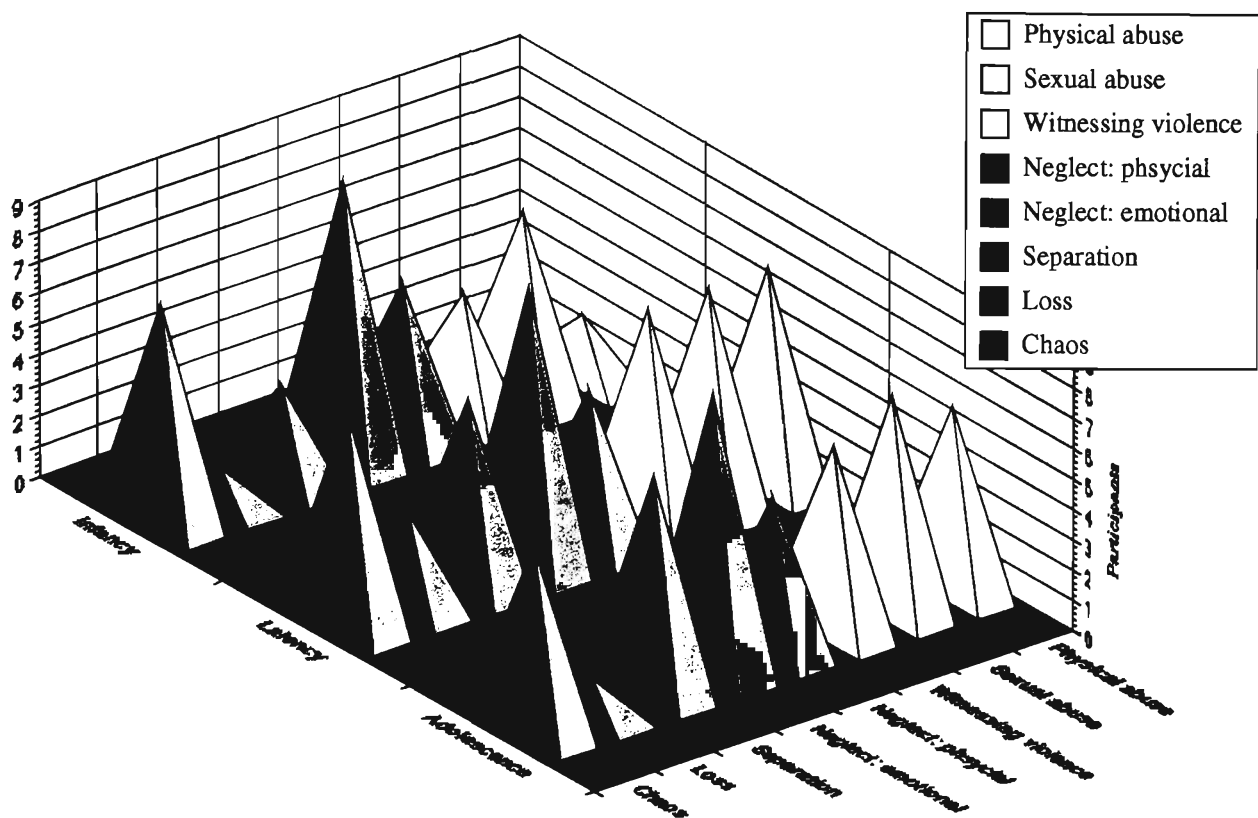


Figure 1. TAI score by abuse category and developmental age.

It can be seen from Figure 1 that traumatic experiences were most frequent in latency, between the ages of seven to 12 years. However, neglect and sexual abuse were consistent from early stages for most of the sample.

Single sample *t*-tests were carried out on data from each category of the TAI and each developmental period and compared to a hypothetical protected population (TAI=0). These results are presented in Table 5.

Table 5  
Comparison of Mean TAI category score for each developmental age with a  
hypothetical protected population (TAI=0)

TAI  developmental  category	TAI Trauma category				
	Abuse	Neglect	Separation and Loss	Chaos	Total
Infancy					
<u>M</u>	1.7	1.8	0.4	0.7	4.6
<u>SD</u>	1.8	1.0	0.7	0.5	3.0
<u>t</u>	3.0*	5.7*	1.8	3.2*	4.8*
Latency					
<u>M</u>	2.6	1.8	1.1	0.7	6.1
<u>SD</u>	1.6	1.0	1.1	0.5	3.0
<u>t</u>	5.1*	5.7*	3.2*	3.2*	6.5*
Adolescence					
<u>M</u>	2.4	1.7	0.8	0.6	5.5
<u>SD</u>	1.3	1.1	0.6	0.5	3.1
<u>t</u>	5.8*	4.9*	4.2*	4.1*	5.6*
Total					
<u>M</u>	6.7	5.3	2.1	1.8	16.3
<u>SD</u>	4.3	3.1	1.5	1.4	8.8

\*p<.01. Note: total trauma scores are the sum of category scores.

All results were statistically significant except for separation and loss in infancy. The sample did not suffer significantly more separation and loss in infancy than a hypothetical protected sample.

4.3.2 Hypothesis 2: People Diagnosed with BPD Will Have Dissociative And Post Traumatic Stress Symptomatology

The DES and MMPI-2-PK and PS scales were used to measure post traumatic stress symptomatology. Mean results for these tests and the norm from the literature for the DES (Carlson, 1993) and the MMPI-2 manual (Hathaway & McKinley, 1991) are shown in Table 6.

Table 6  
Descriptive statistics for posttraumatic stress and dissociative symptomatology

Descriptive Statistics	Measure		
	DES	PK	PS
<u>M</u>	31.4	91.8	91.2
<u>SD</u>	17.3	10.7	8.3
Norm	7.8	65.0	65.0
<u>t</u>	4.3*	16.0**	12.4**
Sample Range	13-69	67-104	73-102

\*p < .005, \*\*p < .001

PS and PK correlated significantly (Pearson  $r = .9$ ,  $p < .0001$ ). This result indicates that there is little discrimination between the scales, and either could be used in this kind of sample with little effect on outcome.

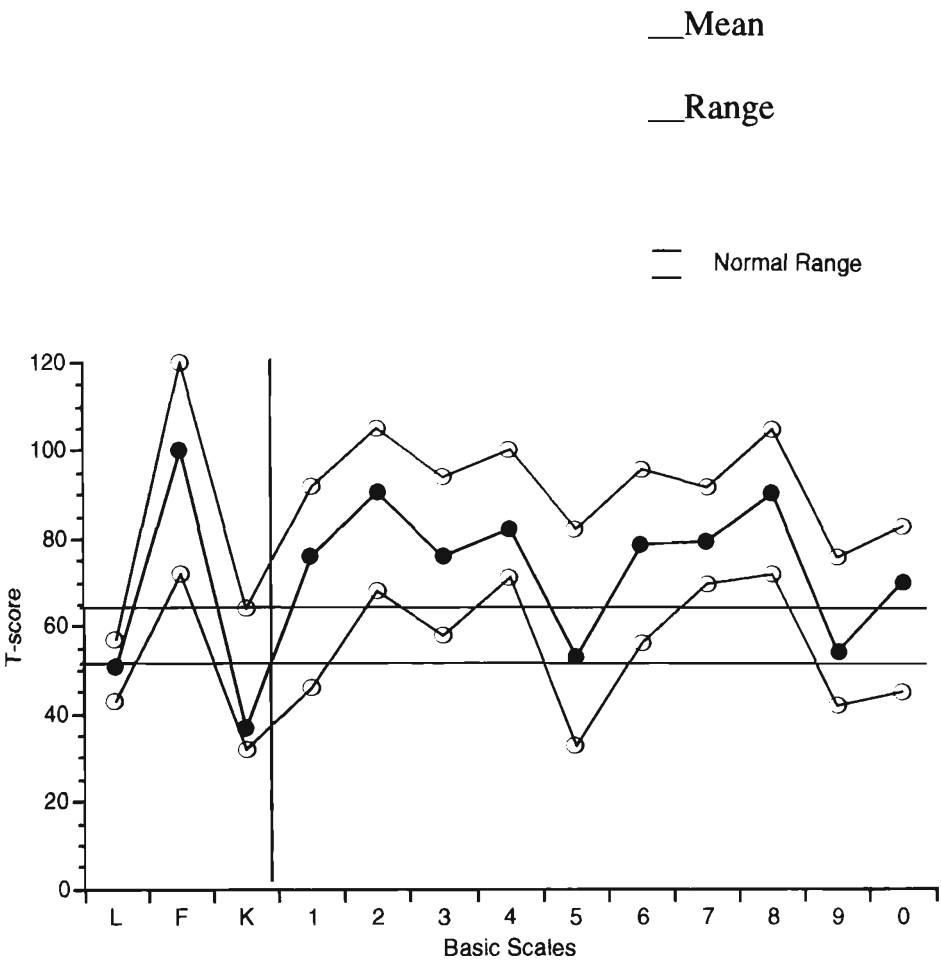
Single sample  $t$ -tests were used to investigate whether there were any significant differences between the sample and norms. The MMPI-PK and PS scale means were compared to a mean T-score of 65, the highest score in the normal range. All results were statistically significant, illustrating that the sample was experiencing significant post traumatic stress and dissociative symptomatology at the time of assessment (see Table 6).

#### 4.3.3 Hypothesis 3: There Will Be A Consistency Of Personality Structure Among Adults Diagnosed With BPD

The adult personality profile was measured using the MMPI-2, and half the sample also completed the Rorschach Inkblot Test. Although it would be useful to compare MMPI-2 and Rorschach results for each individual to indicate levels of difference and similarity among test results, such a comparison is beyond the scope of the present work.

##### 4.3.3.1 MMPI-2 Basic Scales

Unless stated otherwise, results are reported in T-scores. Mean scores and range of scores for the Basic Scales — the Clinical and Validity Scales — are shown in Figure 2.



**Figure 2.** Mean profile of Basic Scales of the MMPI-2 for the sample.

**A. Validity scales.**

Results of the validity scales are presented in Table 7.

Table 7

Descriptive statistics for the MMPI-2 validity scales (in T-scores)

Scale	<u>M</u>	<u>SD</u>	Range
? Cannot say	0.6	0.7	0-2#
L	51.9	8.0	43-66
F	100.3	17.5	72-120
Fb	107.7	16.2	70-120
K	39.8	10.0	30-63
VRIN	47.3	7.2	42-62
TRIN	56.1	5.1	50-65

# Raw scores

Results of the F and Fb were not significantly different ( $t(9) = -1.0, p > .4$ ). This indicates that the protocols were answered in a consistent manner. The F scale indicates that the participant had clinically psychotic thought processes or made a plea for help in the way she answered the questions (Hathaway & McKinley, 1991).

The pattern of the main validity scales (L, F and K) forms the inverted V that is common in protocols of people diagnosed with BPD (Gartner et al., 1989).

All VRIN and TRIN scores were valid (VRIN T M = 47.3, SD = 7.2; TRIN T M = 56.1, SD = 5.1). These results indicate that the participants did not respond in an 'all true' or variable manner, and supported the premise that the profiles were interpretively useful rather than invalid.



## B. Clinical scales.

Results show elevations above  $T=65$  across between six and nine of the ten clinical scales. One participant (number four) had six elevated clinical scales, three participants had seven, three participants had eight and two participants had nine.

One hundred percent (100%) of participants showed elevations on scales 2 (Depression), 4 (Psychopathic deviate), 7 (Psychasthenia) and 8 (Schizophrenia). Ninety percent (90%) of participants showed elevations on scales 3 (Hysteria) and 6 (Paranoia). Eight out of ten participants showed elevations on scales 1 (Hypochondriasis) and 0 (Social introversion). In contrast only one participant, number one, scored an elevation on scale 9 (Mania) (see section 4.4.1), and one participant (number seven) scored an elevation on scale 5 (Masculinity-Femininity). The participant with an elevation on scale 5 had a serious hormonal disorder (see section 4.4.3). These results show a uniformity of personality profile across the sample in terms of intensity of personality (shown by the high number of elevations) and in the specific scales that were elevated.

The mean score for each clinical scale was compared to the highest possible score in the normal range— $T = 65$ —using single sample  $t$ -tests. The Mf scale was compared to the median  $T$ -score of 57.5 rather than  $T = 65$  as this scale was not normed on a psychiatric population. These scores are presented in Table 8.

Table 8

Descriptive and t statistics for the Clinical Scales of the MMPI-2.

Scale	<u>M</u> (T-score)	<u>SD</u>	T-score Range	<u>t</u>
1. Hypochondriasis	75.9	15.7	46-92	2.2*
2. Depression	90.4	12.1	68-105	6.6**
3. Hysteria	79.6	15.7	58-94	3.5**
4. Psychopathic Deviate	82.2	12.6	71-100	4.3**
5. Masculinity-Femininity	52.9	14.6	33-82	1.0#
6. Paranoia	78.8	12.3	56-96	3.5**
7. Psychasthenia	79.6	6.2	70-92	7.3**
8. Schizophrenia	90.7	11.1	72-102	7.3**
9. Mania	54.4	10.1.	42-76	-3.3
0. Social Introversion	70.1	12.6	45-83	1.3

\*  $p < .05$  \*\* $p < .01$  # compared to  $T = 57.5$  (median normal score)

After Bonferroni adjustment, a significance level was set at .01 to account for significant results occurring by chance with a high number of t-tests on one data set.

#### 4.3.3.2 Rorschach Test

Seven participants completed the Rorschach. Five of these protocols were valid and were scored. The other two protocols were invalid for scoring with the Exner Comprehensive System due to the number of responses being fewer than 14. The results of the five valid protocols are presented in Table 9.

Table 9

Rorschach results

Participant	EB (M : Sum C)	FC : CF + C	Adjusted D
1	3:3.5	2:2	0
3	2:2	1:1	0
5	5:8	3:5	+1
6	5:5	1:4	+1
9	5:6	1:4	+2

A. FC : CF + C.

Two participants scored an equal ratio for the FC : CF + C, indicating less control over emotional impulses. The remaining three, participants one, five and six, were weighted on the colour side indicating that they had difficulty in modulating affective displays, or were less willing to control emotional expression, compared to most adults (Exner, 1993a).

B. Erlebnistypus (EB) (M : Sum C).

Two participants showed an extratensive style, where the difference scores between M (human movement responses) and Sum C (colour responses) were larger than 1.5, weighted on the colour-dominated side of the ratio rather than the form-dominated side. These participants would be expected to draw resources from their external relationships to satisfy their inner needs, and tend to show more emotion in their everyday life (Exner, 1993a). Three participants were classified as ambitent, and

showed an inconsistent impact of feelings on behaviour. These participants included one who had a difference of 0.5, favouring the Sum C direction, and two who had an equal M : Sum C ratio.

#### C. Adjusted D.

Two of the five protocols scored an Adjusted D of 0; two protocols scored 1 and one scored 2. These results indicated that the sample had a reasonable capacity to maintain control under stress (Exner, 1993a).

#### 4.3.4 Hypothesis 4: Severity Of Childhood Trauma History Will Be Positively Related To Dissociation, Post Traumatic Stress Symptomatology, And Severity Of MMPI-2 Clinical Profile.

Spearman's rank order correlation's were carried out on all test scores, and are shown in Table 10.

Table 10

Spearman rank correlation coefficients for all tests (N=10)

	DES	No. of	PK	PS	TAI
MMPI-2					
elevations					
DES	--	-.61*	-.29	-.01	-.47
No. of		--	.72**	.51	.63#
MPI-2					
elevations					
PK			--	.81**	.58#
PS				--	.64*
TAI					--

\*\*p < .01 \*p < .05 # p < .1 df = 9

Total TAI scores correlated significantly with the MMPI-PS scale ( $r_s(9) = .64$ ,  $p < .05$ ); and approached significance when correlated with MMPI-PK scale ( $r_s(9) = .58$ ,  $p = < .1$ ) and the number of elevations on the clinical scales of the MMPI-2 ( $r_s(9) = .63$ ,  $p < .1$ ). The number of elevations on the clinical scales of the MMPI-2 also significantly correlated with the MMPI-PK scale ( $r_s(9) = .72$ ,  $p < .01$ ). However, the relationship between the DES and all other measures was negative, and significant negatively when correlated with the number of elevations on the clinical scales of the MMPI-2 ( $r_s(9) = -.61$ ,  $p < .05$ ). Dissociation scores increased as total trauma, general

psychopathology (as measured by the number of elevations on the clinical scales of the MMPI-2) and post traumatic stress symptomatology scores decreased.

Individual scores were analyzed to investigate the finding of a negative correlation between DES and all other scores, and are presented in Table 11.

Table 11

DES, TAI, and MMPI-2- PK and PS raw scores for each individual.

Participant	1	2	3	4	5	6	7	8	9	10
DES	13	43	21	26	34	26	13	46	69	23
TAI	23	6	11	8	35	17	19	17	8	21
PK	104	84	89	89	94	67	96	97	95	103
PS	102	85	88	88	98	73	97	96	94	91

The scatterplots are provided in Figures 3, 4, 5 and 6 below.

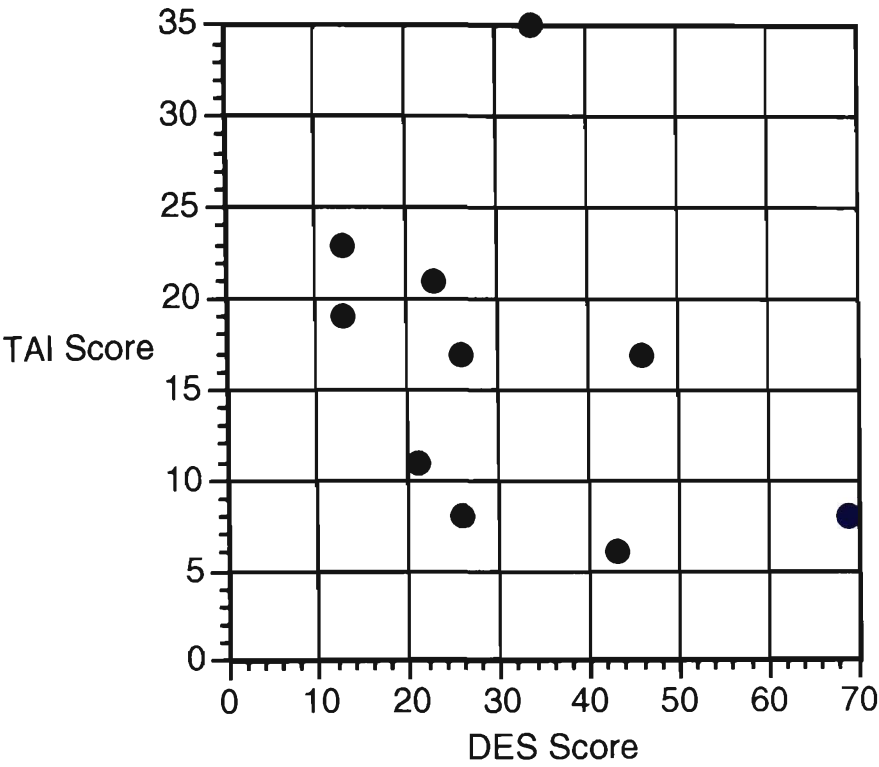


Figure 3. Scatterplot of total TAI and DES scores.

The statistically non-significant negative relationship between TAI and DES scores can be readily identified in Figure 3. Two visual outliers can also be identified. These are participants’ five and nine, and are discussed in detail in section 4.4.

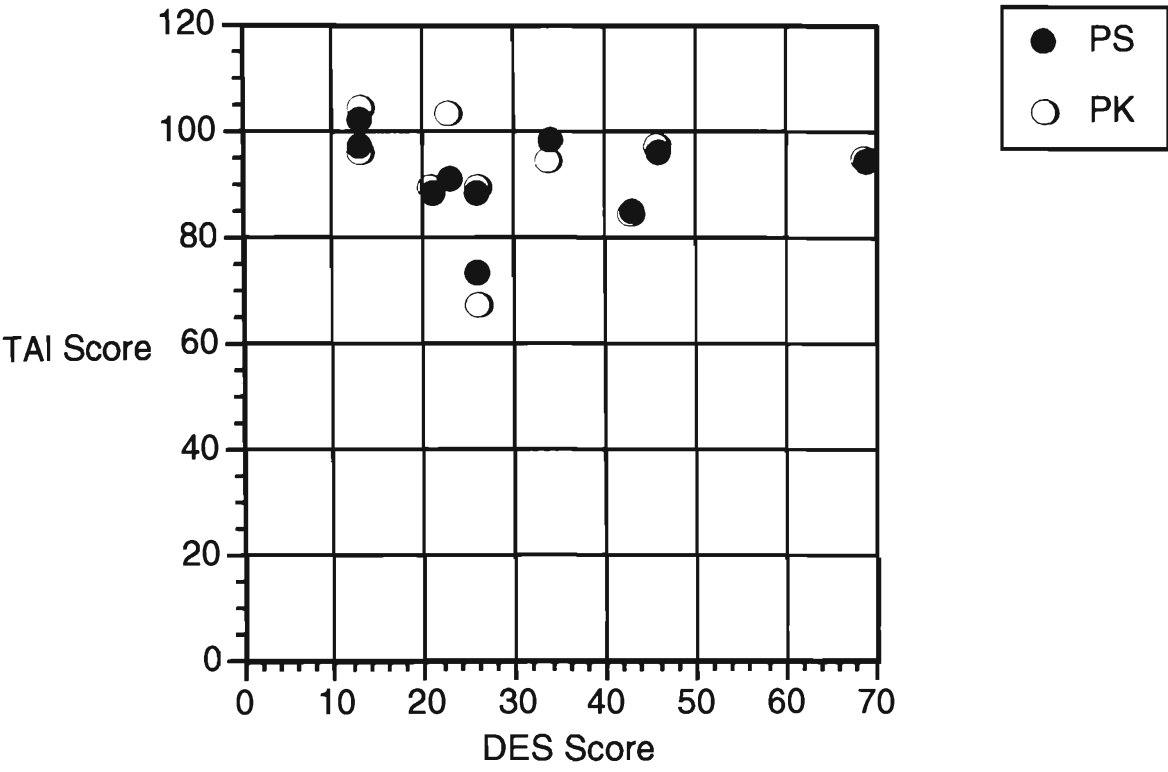


Figure 4. Scatterplot of PS and PK on DES scores.

Figure 4 confirms the statistical finding of no relationship between DES score and PK and PS scores.



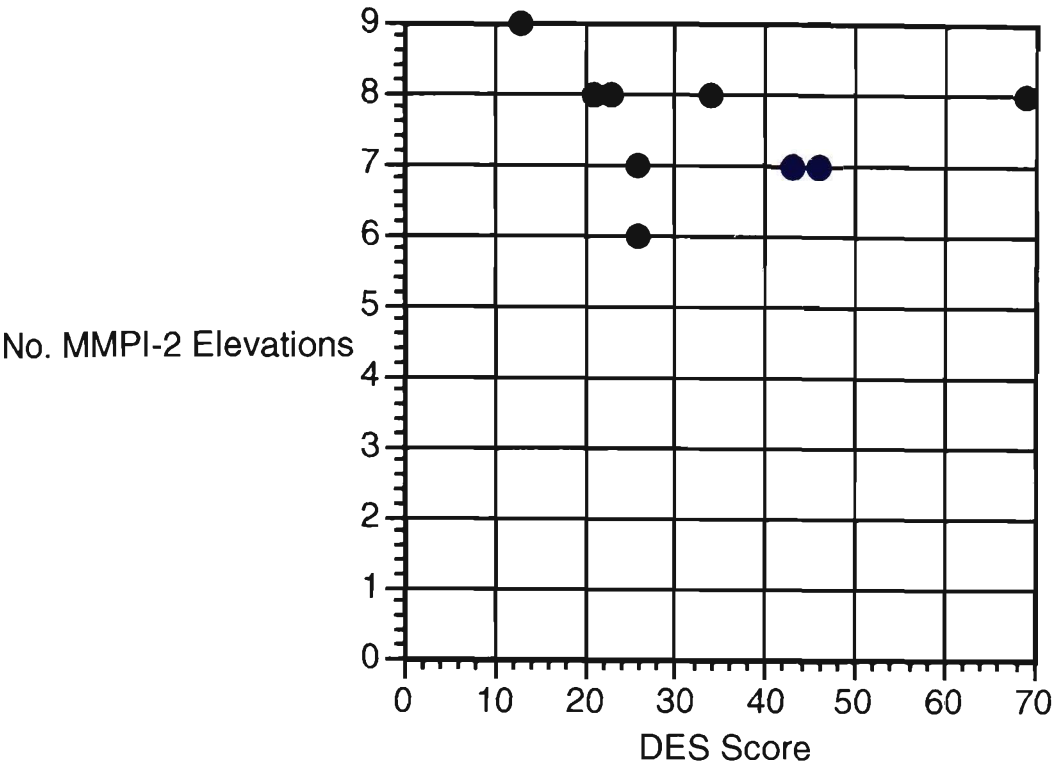


Figure 5. Scatterplot of number of MMPI-2 elevations on DES score.

Note in Figure 5 that two people scored 13 on the DES and had nine elevations on the clinical scales of the MMPI-2. These two appear as one in the figure. The limited range of MMPI-2 elevations may distort results of correlation equations. Even so, the scatterplot indicates no association between DES score and number of elevations on the MMPI-2 clinical scales. This was confirmed by the correlation coefficient.

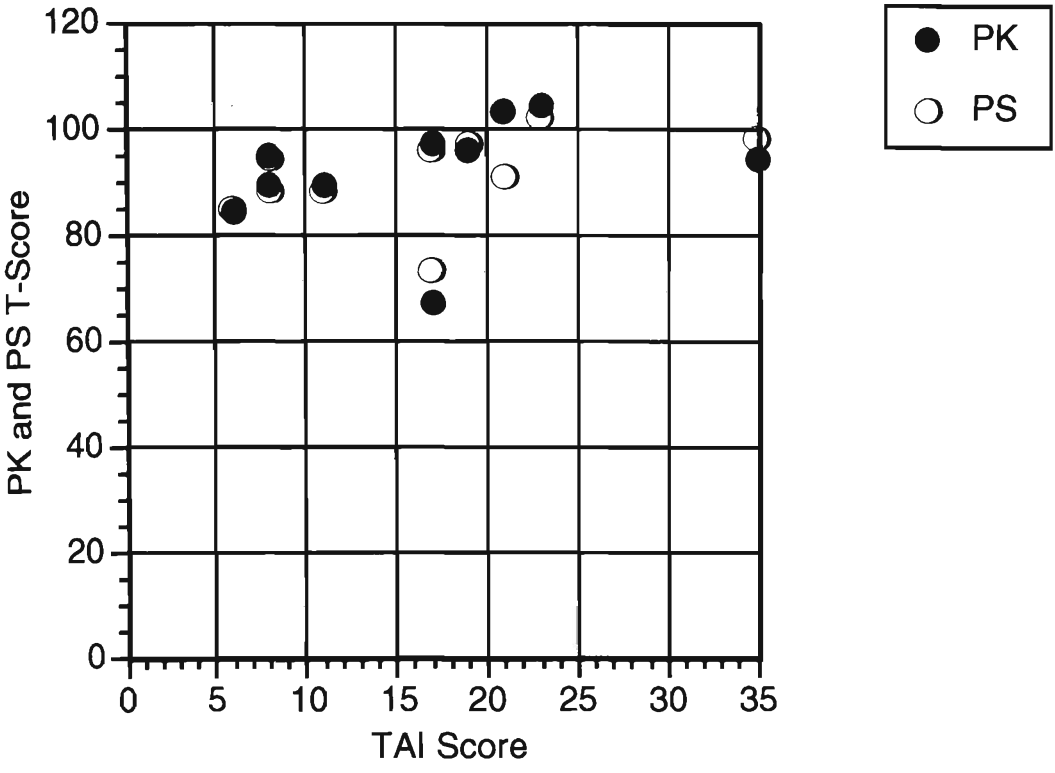


Figure 6. Scatterplot of PK and PS scores on TAI scores.

From Table 10 and Figures 3 to 6 some unusual cases can be identified and each of these is explored in section 4.4 as a case vignette.

Participant one had one of the lowest DES scores, but a comparably higher TAI score. Participant one also had one of the highest overall numbers of elevations of the clinical scales of the MMPI-2, and the highest PK and PS scores. Participant one is therefore typical of the negative correlation between dissociation and reported trauma. This person's experience is reported in a case vignette to explore her pattern of results.

Participant nine had the highest DES score and one of the lowest TAI scores. Participant nine is therefore another negative example of reported trauma and dissociation, and is investigated further below.

Participant two was the only case to report no emotional neglect in childhood. Participant two is also another example of the negative correlation between trauma and dissociation, as she had one of the lowest TAI scores ( $TAI = 6$ ) and a comparably high DES score ( $DES = 43$ ).

Participant six scored median TAI and DES scores, but had the lowest PK and PS scores. These scores were lower by at least 17 and 12 T-points than other participants' PK and PS scores. Her lower PK and PS scale scores were not reflected by lower scores on the Clinical scales, and she had seven scales elevated. Her situation warrants further investigation.

Participant five had the highest TAI score of the sample ( $TAI = 35$ ), but scored median scores on all other tests.

#### 4.3.5 Summary of Quantitative Analysis

Some conclusions may be made regarding the hypotheses. It is important to state that the following conclusions can only be applied to the current sample due to the small sample size. Any conclusions generalised to a greater population are tentative at best.

##### 4.3.5.1 Hypothesis 1: People Diagnosed With BPD Will Have A History of Childhood Trauma.

Results from the TAI show that 100% of the sample had suffered some form of childhood trauma. Ninety percent suffered some form of abuse (participant nine did not), 90% experienced either emotional or physical neglect (participant two did not), 90% experienced either a separation or loss in childhood or both (case two did not), and 70% came from a chaotic home environment (participants two, three, and four did not). These results provide overwhelming support for accepting Hypothesis 1.

##### 4.3.5.2 Hypothesis 2: People Diagnosed with BPD Will Have Dissociative and Post Traumatic Stress Symptomatology

DES scores show that all participants experienced significant dissociation above the norm. The sample mean score was found to be significantly higher than scores from a non-psychiatric population. All ten participants scored above a clinically significant T-score of 65 on both the PK and PS scales of the MMPI-2. This result illustrates that the sample was experiencing significant post traumatic stress symptomatology comparable to that experienced by war veterans. Taken together these results support Hypothesis 2.

#### 4.3.5.3 Hypothesis 3: There will be a Consistency of Personality Structure among Adults diagnosed with BPD

Results from the MMPI-2 results show a uniformity of personality profile across the sample in terms of intensity of personality (shown by the high number of elevations) and in the specific scales that were and were not elevated.

These results provide support for accepting the hypothesis that there is a consistent personality profile on the MMPI-2 amongst participants with BPD.

Results from the Rorschach Test do not allow any conclusions to be made regarding the personality profile of BPD as shown on projective measures. This was mainly due to the small sample size making generalisation of interpretations of results almost meaningless. Nevertheless, the varied results on the five protocols provide a trend towards rejecting Hypothesis 3. The findings of both extratensive and ambitent styles raise the possibility of two styles of personality functioning for participants with BPD on the Rorschach Test.

#### 4.3.5.4 Hypothesis 4: Severity of Childhood Trauma History Will Be Positively Related To Dissociation, Post Traumatic Stress Symptomatology, And Severity of MMPI-2 Clinical Profile

Results of Spearman Rank Order correlations show that as severity of childhood trauma increased, so did the severity of the MMPI-2 clinical profile and the post traumatic stress symptomatology. However, as the severity of childhood trauma increased, dissociation appeared to decrease. Therefore Hypothesis 4 may be accepted when dissociation is not included, and rejected when it is.

#### 4.4 Qualitative Analysis

To shed light a negative correlation between dissociation and trauma—

1. Participants one and nine were identified as opposite examples of the negative correlation between dissociation and reported trauma.

2. Participant two was also identified as a negative case. But this result occurred in the unusual context of no emotional neglect.

3. Participant five scored the highest TAI score, and a similarly high DES score (35 and 34 respectively). It is useful to compare her to participant nine, who had similar PK and PS scores, but had the highest DES score, and one of the lowest TAI scores.

4. Participant six had the lowest PK and PS scores of the sample but did not have median scores on other tests.

The case material for qualitative analysis is shown in Table 12.

Table 12

Cases identified to shed light on negative correlation between trauma and dissociation.

DES	TAI	
	High	Low
<u>High</u>	participant 5	participant 9 participant 2 (no neglect)
<u>Low</u>	participant 1	NA*

\*NA: Not available. There was no participant who scored low TAI and DES scores.

Participant six is not included in Table 12. Participant six had median TAI and DES scores, but had the lowest PK and PS scores, indicating trauma and dissociation similar to most participants, but relatively low post traumatic stress symptomatology. Participant six, however, had significant psychopathology, indicated by six clinical scales elevated on the MMPI-2.

The five participants reported above were considered further through detailed case vignettes. This method allowed the investigation of individual differences and provided a picture of the cumulative and “nested” trauma of each participant. The analysis of individual data was used to shed light on the negative correlation found between childhood trauma history and dissociation, which might in turn generate hypotheses for future research. Although numbers identified each participant during

the research, synonyms were chosen for writing the cases to preserve both the humanness of the story and the confidentiality of the participant.

#### 4.4.1 Negative Association between Trauma and Dissociation

An investigation of participants nine and one might shed light on the finding of negative correlation between trauma and dissociation.

Case one (Anna) had one of the lowest DES scores (DES = 13), but a comparatively higher TAI score (TAI = 23) and the highest PK and PS scores (T= 104 and 102 respectively). Her case is discussed first.

##### Case One (Anna)

"Anna" was a 32-year-old woman who lived with her boyfriend and two primary school aged children. Although Anna reported having good physical health, she had been ill for two to three weeks in the last year, had asthma, and smoked a packet of cigarettes a day. Long standing difficulty with marijuana and alcohol had led her to seek help from drug and alcohol services. Anna was prescribed two different anti-depressants, which she had been concerned about becoming addicted to. She was also concerned that these medications would "make me a zombie like my mother".

Anna's early life was spent with her mother and her four older brothers-Derek, Andrew, Geoff and Allan. All her brothers were at least five years older than she was. Anna's father died from the effects of a stroke when she was three years old. Her maternal grandmother brought up Anna's youngest brother, Matthew. Matthew was younger than Anna by 13 months and he went to live with his grandmother when his mother was hospitalised for depression for some months. At



this time Anna also went to stay with her grandmother, however, when her mother returned home, Anna also returned home. However, Matthew remained living with his grandmother.

Before he died, Anna's father was a taxi driver, while her mother was a full time homemaker who had periodic episodes of major depression, which required hospitalisation at times. Anna described affection as nonexistent as a child, and that the only person who recognised her as special was a teacher she had in primary school. Anna stated that the nuns at her primary school were more caring than her family.

Anna's second oldest brother, Andrew, provided most of Anna's day to day care when she was a child, due to her mother's incapacitation from depression. Andrew went to juvenile prison for stealing and truancy when Anna was about seven years of age, during which time Anna's next oldest brother, Geoff, cared for her. Andrew left home soon after his return from prison.

During childhood and adolescence, Anna described having had two or more close friends and belonging to a positively identified peer group. She described a number of things that she was good at as a child, including making cakes and running. She was close to two of her brothers, Andrew, and Geoff, but was distant with Matthew, who lived with her grandmother, and had a hostile relationship with her oldest brother, Derek. She also had a hostile relationship with her brother Allan, who was slightly older than she was.

Before he died, Anna's father was an alcoholic. Despite her mother's dislike of alcohol, Anna's brothers all drank in large quantities, and she described Andrew as an alcoholic. Anna believed that alcohol was the cause of family, medical, and

financial problems, causing the loss of one of her brother's jobs. She also believed alcohol caused physical fights in the family, troubles with the law, and the inability of family members to care for themselves. Geoff was also arrested for drink driving at one time. Because her brothers were much older than she was, these incidents happened when Anna was as young as eight years. Anna's mother did try to get help for her son's drinking problems at one stage, but was unsuccessful.

Anna felt that rules in the home were inconsistent and changed frequently, and were enforced, primarily by her mother, through scolding, verbal abuse and hitting. She also had curry powder put on her tongue when she swore. During her teenage years, Anna was punished in these ways once or twice a week. Violence was a frequent occurrence in the family, usually in conjunction with alcohol use. Anna remembered her oldest brother, Derek, threatening her mother with a knife when Anna was about 11 years old. Derek often threatened to kill both Anna and her mother. Anna and her next oldest brother, Allan, would often fight with one another. In one incident Anna described Allan grabbing her by the throat and trying to strangle her. Allan also threatened his Geoff with a wooden stake. There were also frequent fist fights between the brothers. This only stopped when the brothers left the family home. When Anna was about 11 her Derek was jailed for rape. There was also a gun in the house, which was never fired, but was used to threaten someone outside the family. Occasionally the police were called to limit the violence in the home, with varying degrees of success. Violence continued into Anna's adulthood, where she was involved in a physical fight with her sister in law in her early 20's. Derek also violently raped his brother's ex-girlfriend when Anna was 31.

When Anna was a child she got most of her sexual information from her mother and school, although her mother was embarrassed and secretive about sexual matters, and Anna felt that she was not able to discuss sex with any family member. When she was four years old, her Derek, and one of his friends touched Anna in a sexually inappropriate way. Although this was kept a secret, Anna felt that the family knew but did not do anything about it. When she was about eight years old, Allan began sexually abusing her. He threatened her to keep her from telling anyone, and particularly warned against upsetting their mother—he said telling mother would cause another breakdown and need for psychiatric hospitalisation. This sexual abuse ended when Anna was 12, after she formed a relationship with a boy who moved in to the family home. Anna eventually married this man. When Anna was ten her basketball coach also touched her in a sexually inappropriate way. This was a single incident with no associated threats, but was kept a secret. Finally, her ex husband raped Anna when she was 24 years of age. This was also kept a secret. Anna described being too ashamed to tell anyone or get help for unwanted sexual experiences when she was under 16. In adulthood, Anna sought psychotherapy to help her deal with the effect of these experiences on her life.

Anna was referred to the study by her psychotherapist at the Victoria University (VU) Clinic, whom she had been seeing twice a week for 18 months. Anna had been in psychotherapy at the VU Clinic for three years with another psychotherapist prior to beginning work with her current therapist. She found her experience of psychotherapy helpful, and noted her psychotherapist as one of the people she relied upon for emotional support. She also attended a drug and alcohol support service, which she found to be emotionally supportive.

Of all of the traumatic things that happened to Anna in her life, she described the sexual abuse perpetrated by Allan as having had the most lasting effects on her life. She felt that counselling and bringing out into the open had been most helpful in overcoming the traumatic effects of these events. She felt that telling the secret, sharing her story and finding that she was not alone were very powerful in helping her heal herself. Based on her experiences, she would advise people urgently to seek support and not despair because of shame and guilt. She urged people to believe in inner strengths—if they work through their feelings they can find inner strengths and go on.

#### Case Nine (Maureen)

Case nine, "Maureen", was also an example of the negative correlation between dissociation and trauma. Maureen had the highest DES score and one of the lowest TAI scores. Her PK and PS scores were in the median range. The investigation of her case may shed light on the opposite end of the correlation to Anna's case.

Maureen was 40 years of age when she participated in the research. She was married with three children, and had lived in Australia for 14 years after emigrating from Scotland. She was not working outside the home, and relied upon her mental health case manager for practical and emotional support. She said her health was good, despite suffering from asthma. In the last couple of years she had had bulimia for four months. Two years ago she had been hospitalised for two weeks for anorexia.

Maureen is the youngest of three girls. When Maureen was two years of age her mother got a job outside the home. This meant that her parents were unable to

care for her, and she subsequently went to live with her maternal grandmother. Although this arrangement was meant to be temporary, Maureen didn't return home to live until she was six years old. She would go home every Friday night and come back to her grandmother's on Sundays. Her grandmother died two years after Maureen stopped living with her, when she was eight years of age.

Maureen described her mother as an alcoholic. She was described as an unpredictable drunk, being happy one minute and angry the next. Maureen's father would not drink in the house, but was often drunk on weekends. He was described as a happy drunk. When Maureen asked her mother to stop drinking she would be told to mind her own business.

Maureen thought that alcohol had been a main contributor to marital difficulties between her parents, and also at times caused her mother to be unable to care for herself or her family. Maureen described her parents' relationship as volatile, and that they argued loudly and often threatened to leave the family home. Although Maureen described the rules in the home as clear and consistent, she said that her mother would verbally abuse her and often say she was no good. This was in the context of other punishments such as scolding and withholding privileges. Maureen was hit on one occasion by her mother with the back of her hand. Her mother would punish Maureen up to twice a week. Regarding her relationship with her mother, Maureen said 'mum wasn't one for showing love and attention. You'd put your arm around her and she'd say "go away, don't annoy me"'.

Maureen said that she had not experienced any unwanted sexual contact before the age of 16 years. However, when she was 16 or 17 she described an incident where her brother in law tried to get into bed with her when he was drunk.

Maureen 'fought him off' and screamed. Her father heard her screams and came and got her brother in law out of her room. Regarding this incident, Maureen said 'every now and then it comes into my head and I try and block it out'. She said that she had nightmares about it.

Maureen twice tried to run away from home: when she was 12 and again when she was 15 years old. She said she ran away because of the 'lack of love and attention' at home and the fact that her parents were always arguing. In the end she lived at home until she married at 26 years of age, this was also when she immigrated to Australia. She did not describe any contact with mental health services until she was in her late 30's when she was hospitalised for anorexia. Six months prior to her participation in the research she began intentionally hurting herself by cutting her arms and wrists. She had attempted to suicide by overdose twice. She felt that nothing had helped her overcome the traumatic effects of her life but suggested that others in her position try to get help rather than letting it go.

#### Analysis of cases One (Anna) and Nine (Maureen)

Anna's TAI score was 23, reflecting the significant traumatic experiences in her life. She also scored positive for emotional and physical neglect across all three developmental ages. Separation and chaos were also scored for all three ages, but her only scored loss was that of her father in infancy. Her DES score of 13 was one of the lowest in the sample.

Rather than reflecting an effect of childhood traumatic experiences, Anna's DES score may reflect what she has done to overcome the effects of her experiences. She found talking through the trauma with her psychotherapist a helpful experience, and found the knowledge that she was not alone a powerful positive experience. Her

encouragement of people to rely on their inner strengths suggests that she had developed her inner strengths and successfully applied these strengths to begin working through her psychological distress. The result of this work may be a lessened reliance on dissociation as a defense against the pain associated with her past trauma, resulting in a lower DES score.

If it is the case that Anna's lower DES score is a reflection of a reduced level of dissociation (through psychotherapy), what then of her PK and PS scores? These were the highest scores of the sample, and reflected feelings of intense emotional distress and guilt, sleep disturbances, anxiety, and intrusive thoughts. One way of conceptualising this incongruity is that Anna's experience appeared to reflect the overwhelming aspects of PTSD rather than the psychic-numbing constellation.

The overwhelming aspects of PTSD where the trauma is re-experienced include intrusive memories and flashbacks of the trauma; nightmares; distress when reminded of the trauma by things in everyday life; and a physiological reactivity in situations that are similar to the original trauma (APA, 1994). These feelings are often accompanied by increased arousal such as irritability, sleep problems, difficulty concentrating, hypervigilance and exaggerated startle response (APA, 1994). In contrast, the avoidance and psychic-numbing symptoms of PTSD include active efforts to avoid thoughts, feelings, places, and people that are associated with the trauma; amnesia for aspects of the trauma; reduced interest or participation in activities; feelings of detachment from others and having a sense of a foreshortened future; and a restricted range of feelings available for expression (APA, 1994).

The number of elevations on the MMPI-2 supports the premise that Anna may have been experiencing a dominance of the intrusive and overwhelming aspects of

PTSD. Anna scored nine elevations across the clinical scales of the MMPI-2, and was the only person to score an elevation on scale 9 (Mania). These results indicate a high degree of psychological distress and intensity of experience that was at times overwhelming.

The case of Maureen presented a different picture to Anna, and may represent the opposite end of the negative correlation between trauma and dissociation.

Maureen's childhood history is significant for the separation from her mother at two years of age. At this age the separation would be experienced as a loss for the infant. After four years Maureen was separated again from her primary caregiver and returned to her mother: another significant loss. A further loss occurred two years later when her grandmother died. The chaos and emotional neglect Maureen experienced in her parental home complicated her history of separation and loss further. These experiences resulted in a very disrupted and difficult environment for the young Maureen to grow up in.

Maureen was very difficult to engage in conversation, displayed a flattened affect, and spoke quietly in interview. She was also very passive and did not elaborate on her answers. She made a minor laceration to her wrist half an hour before the interview was scheduled to begin. Although a superficial wound, the entire TAI was deferred for one week. The week-long break may have interrupted the rapport established in the first session, and hampered disclosure.

Disclosure may also have been hampered by depression; evident in Maureen's flattened affect, recent suicide attempts, and history of early loss. It is likely that Maureen met the criteria for the diagnosis of Major Depression on Axis I. This may call into question her diagnosis of BPD on Axis II. However, Maureen's MMPI-2



profile was consistent with the sample and with previous research findings regarding the MMPI-2 and BPD (e.g., Gartner et al., 1989).

It is possible that Maureen's memory of her brother in law getting into bed with her is a screen memory, and her flashbacks relate to some other experience of abuse at an earlier age. With no facts to go on, this is purely speculation. However, considering her high DES score, it is possible that Maureen dissociates from memories of abuse each time they come to mind, which may result in them not being available to her in interview. Her low TAI score may therefore be based upon, rather than contradictory to, her high dissociation.

Maureen had recently begun supportive psychotherapy on a weekly basis with her case manager, a psychologist. Prior to this she had not had any psychotherapy.

Maureen's low TAI, high DES, high PS and high PK may therefore reflect a dominance of the avoidance and psychic numbing aspects of PTSD. Her flattened affect in interview is also indicative of psychic numbing and reduced arousal. Maureen also had the same pattern of elevations across the clinical scales of the MMPI-2 as Anna, with the exception of scale 9 (Mania). Maureen did not have an elevation on scale 9; Anna did.

Thus the cases of Maureen and Anna shed light on the negative correlation between reported trauma and reported dissociation found in quantitative analysis of results. Anna appeared to have been experiencing more of the overwhelming aspects of PTSD, whereas Maureen appeared to have been experiencing more of the psychic numbing aspects of PTSD. Furthermore, it is possible that Maureen may have reported a lower level of trauma due to dissociation and amnesia for events.

Some conclusions may be made from the analysis that shed light on the negative correlation between trauma and dissociation.

- Low trauma scores may be based upon high dissociation scores—dissociation may occur to the extent that participants are unable to verbally report childhood trauma experiences. They may also have actual amnesia for past traumas.
- High trauma scores in the context of low dissociation scores may reflect the two-way effect of PTSD of the dominance of overwhelming and intrusive symptomatology over the psychic-numbing constellation, and vice versa, although both constellations are present. The two-way effect of PTSD suggests that lower levels of dissociation is not an indicator of lower severity of post traumatic stress in people diagnosed with BPD and a childhood history of trauma.
- Very early maternal loss may interrupt attachment and create a reduced capacity to cope with further difficult experiences. This premise is supported by results from Fonagy and his colleagues' (1996) study of adult attachment status and BPD. This study found that 43% of patients with BPD were classified as having an anxious preoccupied attachment, characterised by passivity in the interview regarding childhood experiences that were not well defined (Fonagy et al, 1996).
- Psychotherapy may reduce the incidence of dissociation in people diagnosed with BPD and result in lower dissociation in conjunction with higher reported childhood trauma.

#### 4.4.2 Negative Correlation Between Trauma And Dissociation in Context of no Emotional Neglect

Case Two, "Barbara", was identified as a negative case for emotional neglect. Case Two also showed high dissociation and low reported trauma. These factors warranted further investigation. How might she be different to others in the sample with BPD?

##### Case Two (Barbara)

Barbara was a 34-year-old participant who was studying for a Degree in Applied Science and Intellectual Disabilities when she took part in the research. Barbara had never been married and had no children. She lived in a shared house, and survived on a government pension. Barbara relied upon her housing worker for practical help, and her psychiatrist, psychologist and flatmates for emotional support.

Although Barbara did not describe any specific physical illness, she said that her health was generally poor, and she smoked a packet of cigarettes a day. She had been taking antipsychotic, antianxiolytic and antidepressant medication for about four years, and felt that this had given her a weight problem (she was somewhat overweight rather than obese).

During the previous six months Barbara had tried to commit suicide four times. Since she was 28 she had also cut and burnt herself and had run in front of traffic. She had had 25 psychiatric hospitalisations in six years, many of which had been private and voluntary.

Barbara lived her early life with her mother and father and four siblings, one of whom was her twin. Barbara's parents were both professionally employed, and her

mother worked as the head of an English department, while her father was a journalist. During her childhood Barbara felt that her sisters and maternal grandparents were consistently affectionate towards her, but not her parents. There was a friend of the family that Barbara was very close to, and felt safe with, but he died when Barbara was 24. This friend took care of Barbara.

When she was 17, Barbara left home because of her parents' divorce. She had been asked to choose which parent she wanted to live with, and chose instead to move away from both of them and live interstate and seek employment. Before this she had attempted to run away from home at six years of age, but only gotten around to the side of the house and hidden. Barbara stated that she had "run away from the abuse".

At school Barbara described having had generally close friends, but the group she was part of was quite naughty. This was the case in both primary and high school.

The discipline at home was described as consistent, but "sometimes with dad it was a bit over the top". Generally, Barbara was yelled at when she did something wrong, which was not frequent. However, Barbara described her parents arguing every day, which was very upsetting to her, and she vowed not to repeat this in her adult life. When her parents argued Barbara would go off and cry by herself. During adolescence, arguments between Barbara's parents and between herself and her parents increased.

Barbara learnt about sex from her friends because she didn't want to talk to her family about it. When she was five years old her male baby-sitter molested her. This was a one-off occasion. Between the ages of nine and 16, Barbara's uncle (her mother's sister's husband) coerced and manipulated her into sexual contact with him.

This happened about twice a month until Barbara got a boyfriend when she was 16. Barbara found this relationship very confusing because her uncle would say nice things to her while doing “horrible things”. Barbara told her friends at school what was happening to her, but did not get any help.

On holiday when she was 15 years of age, a stranger raped Barbara. This was not a violent rape, but Barbara was mortified and started to think that her role in life was as a sex object for men to do with as they pleased. This was reinforced by being raped again when she was about 21 and again, very violently—she was knocked unconscious—when she was 25. Strangers perpetrated all these incidents and all kept secret.

As an 18-year-old student, Barbara was threatened with an axe and a knife by a co-resident at her student accommodation. This man threatened to rape and kill Barbara and her sister. Barbara was very frightened, but was about to offer herself to be raped in order to spare her sister when he ran off. Barbara later heard on the news that ten minutes later this man raped a man and a woman. Barbara felt very guilty that she did not report the incident until after seeing it on the news. During the court proceedings the man made threatening phone calls to Barbara attempting to coerce her into saying in court that he had been on drugs.

Of all of the traumatic things that happened to her in her life, Barbara felt that the force, violence, and coercion were the worst—worse than the unwanted sexual experience. In her adult life she cut and burnt herself to stop flashbacks and dissociation. She had also prostituted herself at times in psychiatric hospitals for cigarettes. Barbara felt that the support she gained from her psychologist, through supportive psychotherapy, and psychiatrist had been very helpful, as had the support

of her friend and, more recently, her parents. In fact she thought the support of those who worked with her had kept her alive. However, she would advise people to get private health insurance to pay for the required mental health care, and also to tell victims that they are not to blame for their abuse.

### Analysis

When asked the question “who was affectionate towards you in childhood” Barbara initially said her mother, but then changed her mind. She then said her younger and twin sisters, and her maternal grandparents. However, she said that affection was reliable and consistent in childhood. According to the scoring criteria of the TAI this is scored zero for emotional neglect. However, from her account of her childhood, it is likely that Barbara’s emotional needs as a child may have been neglected in her parents struggle to maintain their marriage, their respective careers, and to care for their five children. Barbara resulted from her mother’s third pregnancy, was a twin, and was therefore in the middle of the five children. The TAI scoring criteria state that unless there is direct affirmation of emotional neglect in the interview then it should not be scored.

Barbara’s case was significant because of her reported experience of severe trauma in adulthood, as distinct from childhood, where she was threatened at 18 with an axe, and raped at 21 and 25. These incidents, along with her high DES and PK and PS scores, raise the likelihood that Barbara was suffering post traumatic stress from adult experiences as well as possibly from her experience of sexual abuse in childhood.

The analysis can contribute to understanding of a negative correlation between dissociation and childhood trauma, and supported the premise that patients

with BPD can have PTSD from adult experiences of trauma as well as childhood experience of trauma. Therefore, any conclusions about the effect of adult trauma should also consider the effect of adult trauma.

The analysis raised the methodological issue of the reliability of the TAI. The answers to the TAI have been taken at face value and are therefore vulnerable to participant's interpretation and mood state. Participants nine and two had similarly high dissociation scores and low trauma scores. It is possible that further probing of answers taken at face value may have resulted in higher trauma scores. Until reliability can be established then the validity of TAI results may be open to question.

#### 4.4.3 High TAI and DES Scores

Case Five, "Georgina", scored the highest TAI score, but a DES score that was neither high nor low. Case Nine (Maureen) had similar PK and PS scores, but had the highest DES score, more than twice that of case 5's, and one of the lowest TAI scores. What might account for this discrepancy? The case of Maureen was discussed above. Georgina's case is described below.

#### Case Five (Georgina)

Georgina was a 26-year-old woman who was employed part time. She suffered from a serious hormonal disease, which resulted in infertility, mood swings, and increased facial and body hair. She also had epilepsy, which was not completely controlled by medication, and asthma. Despite these problems she described her health as fair.

Georgina spent most of her childhood in a large rural city, where she lived with her mother, father and younger brother. Georgina's parents had an unsettled

relationship, and her father left home when she was 10 years of age. He stayed away for about six months, coming home on weekends. At one stage he went back to his family in Greece for a period of time. Georgina's mother was also not born in Australia, having migrated from East Germany. The day before she emigrated she witnessed her best friend being shot at the border to the West. Georgina described her mother as suffering from depression as an adult.

Georgina described a very difficult home life where the rules were inconsistent and changed frequently, and where her father regularly beat her. Georgina stated they were regularly punished when they got home from school for things they 'must have done'. These 'punishments' included being regularly beaten with a stick from a rose bush, and withholding Christmas presents. This made Georgina think that 'Santa hated me too'. Other, more violent, incidents included Georgina's father injecting her with insulin, running into her with a car, and making her and her brother stand in a posture emulating 'Greek army discipline' for long periods of time.

Georgina's epilepsy developed from a head injury inflicted by her father. When she had seizures as a child her father thought she was faking. She did not get treatment for the seizures until her school threatened to report her father for neglect. Georgina described being beaten so badly when she was 12 that her ribs were broken. This was punishment for singing. Georgina also remembered her father throwing boiling water on her two-year-old brother when she was four years old. When she was a baby, Georgina's mother was thrown down the stairs by her father, resulting in a broken leg.

Georgina also experienced significant sexual abuse. Georgina remembered her first sexually abusive experience occurring before she was old enough to go to



school. Her father digitally penetrated her as punishment for not being able to sing 'Twinkle Twinkle Little Star' in Greek. When she was four or five a neighbour involved her in child pornography. Georgina can only remember photographs being taken, but suspects more than this happened over a six-month period. She wondered aloud if her father had set it up. Her participation was rewarded with treats of 'fairy bread'.

As part of the violent control he had on his family, Georgina's father also required certain 'services' to be performed for him. These included washing his feet, changing the TV channel and masturbating him. Georgina reported that her father often walked around the house naked and groped her body against her will. These types of experiences took place every couple of days until she left home at the age of 16. Georgina described sexual abuse as 'part of the deal' on golfing trips as well. Although her father did not penetrate her with his penis, Georgina described penetration with objects and being tied up. These experiences were part of a punishment regime. When she was six to seven years of age Georgina began masturbating her brother against his will, and thus became a perpetrator of sexual abuse as well as a victim.

Between the ages of five to six and eight to nine, her paternal uncle also sexually abused Georgina. This involved oral sex and groping and occurred three to four times a year. Between the ages of 16 and 17 her other paternal uncle also made unwanted sexual advances, including groping and requesting sexual intercourse.

Georgina described her mother as depressed and that she suffered from many physical problems. She felt as an adult that she had lost her relationship with her mother. Georgina described having been very upset that when her mother came to see

Georgina she often brought her husband with her, even though she knew what he had done to her daughter.

When she was in primary school, Georgina described a significant positive relationship with a singing teacher. This teacher encouraged Georgina, and Georgina was subsequently able to find some positive experience and escape through singing. This relationship ended when Georgina changed schools, which happened frequently. Georgina said she changed schools whenever the school 'asked too many questions'. Singing seemed Georgina's only outlet for caring and creative urges. Georgina also described a love of animals, but said that her father killed any pets she brought home.

Overall, Georgina's high TAI score was predominantly due to the abuse she had suffered and violence she had witnessed. Her household was also described as considerably chaotic, particularly as she could never tell when she would get a beating. The separation from her singing teacher was also scored positive—contrary to the scoring criteria—as it was described as a significant positive and supportive relationship in a context where there were no other relationships of this type. Georgina's singing teacher nurtured Georgina's talent and Georgina was able to use singing as relief from psychological distress at times. Georgina's singing was also described as something of her own that no one could take away.

Georgina also reported self-inflicted trauma during her childhood and adulthood. She first tried to commit suicide at the age of 11 by trying to suffocate herself. Self-injurious behaviours of cutting, burning and scratching started in primary school and peaked in adolescence. At one stage Georgina stopped taking her anti-seizure medication in the hope for death by seizure.

## Analysis

Georgina (Case 5) and Maureen (Case 9) were compared to shed light on the negative correlation between childhood trauma and dissociation. Maureen was an example of high dissociation and low trauma scores, whereas Georgina scored high trauma scores and median dissociation scores.

Georgina and Maureen were very different to interview. Georgina easily revealed information about herself, and became emotional at times. The interview lasted for three hours. Maureen, on the other hand, was very difficult to engage in conversation and remained somewhat flat and quiet.

Georgina's trauma and dissociation scores may reflect both a relative availability of traumatic memories to consciousness experienced as overwhelming as well as psychic numbing. It is possible that Georgina's high level of trauma has resulted in severe PTSD that includes oscillation between re-experiencing the trauma and cutting off from it at different times. On the other hand, Maureen's low TAI, high DES, high PS and high PK may reflect a dominance of the psychic numbing aspects of PTSD to the extent that Maureen's DES score was in the range of DID—the most severe dissociative disorder—reported in research literature (Lauer et al., 1993).

It can be concluded from the analysis that participants with BPD and childhood trauma history appear to experience the full range of PTSD symptomatology, including dominance of overwhelming re-experiencing of the trauma, dominance of psychic numbing and dissociation from the trauma, and a relatively equal combination of the two. This conclusion sheds further light on the findings from Hypothesis 4 of negative correlation between dissociation and trauma, in that participants have been shown to experience a dominance of psychic numbing

or overwhelming symptoms of PTSD, and also to experience both aspects of PTSD in a relatively equal mixed presentation.

#### 4.4.4 Low MMPI-2-PK And PS Scores

Case 6 had the lowest PK and PS scores. These scores were lower by at least 17 and 12 T-points than other participants' PK and PS scores. She scored median TAI and DES scores. The fact that her lower PK and PS scale scores were not reflected on the MMPI-2 clinical scales (she had seven scales elevated) warranted further investigation.

#### Case Six (Fiona)

Fiona was a 22-year-old university student. Fiona was suffering from rheumatoid arthritis, which at times made her studies difficult to complete. At the time of her participation in the research Fiona had just been discharged from a psychiatric hospital, where she had suffered depression and had been given ECT without her consent. In the week after her discharge she described several friends coming to see her to offer support, and to generally look after her.

Fiona grew up in a fundamentalist religious community, where her father was a leading churchman. His role in the church involved regular moves for the family between communities, which occurred on average every three years. Fiona's mother was a General Practitioner, and Fiona had three siblings, all younger than herself. The next oldest was a brother, then two sisters. The four children were close in age, ranging over five years from eldest to youngest. Fiona said that her mother was affectionate to her when she was a child, but that this affection was unreliable or inconsistent.

During her later childhood and early adolescence, Fiona described a couple of teachers and a youth group leader who recognised her as a special person. However, she felt that the youth group leader had a secondary agenda to “keep me on the straight and narrow”. When this woman left the church the youth group disbanded. Fiona felt that had these people really known her they wouldn't have liked her anyway.

Before the age of 16, Fiona was not separated from her parents for more than a few weeks. Fiona described her father as having Obsessive-Compulsive Disorder (OCD) and depression. These conditions were identified by his wife and denied by him because of “mother's medicalising”. Maureen reported that her paternal grandfather also apparently had OCD and depression and his sister had depression and her daughter had anorexia. Fiona said her father denied all of these illnesses in his family.

Fiona had one close friend in childhood, but none in adolescence. However, she said that her memory was hazy before the age of 16. She left home at 15 to go and live with friends and in a squat, sometimes going home to stay for periods of time.

Fiona described a very strict regime of rules and punishment in her childhood home. The rules were clear and consistent when set by her mother, but her father's rules were “multitudinous” and “sometimes I could do nothing right”. Fiona considered that the rules were not fairly applied, and that she was treated considerably more harshly than her siblings. Her father punished her with scolding, spanking, withholding privileges, verbal abuse, hitting with an open palm and closed fist, but not on the face, and hitting with a wooden spoon, belt or bamboo stick. She

described going camping and being sent to “pick your stick” to be beaten with. At times she was also kicked while she was down, and pushed down stairs or into walls. Punishment would take place two to three times a week.

Fiona’s parents would apparently solve disagreements by her father yelling at and slapping her mother. Her mother would argue, but not fight back. Fiona suspected that her father hit mother more than the slaps she witnessed. These types of arguments happened a few times a week. Fiona’s father also kept a gun in the house, which was used indirectly to threaten the children. Fiona’s father “made sure we knew there was a gun in the house”. The many family injuries that occurred as a result of the violence, such as strapping of fingers, stitches and bandaging, were usually taken care of by Fiona’s mother and therefore did not come to the attention of outside medical services.

Fiona said that her mother gave her the “period talk” when she was in early adolescence and otherwise spoke to her in a matter of fact way about sex. Fiona felt, however, that she was not able to discuss sex or ask questions with any family member. Fiona said that she had a “shadow memory” of someone trying to have sexual contact with her when she was quite young. She also described sexual abuse by her father from the ages of two or three until she started menstruating at 12 and a half. Fiona felt that the abuse stopped because “you can’t have a minister’s daughter pregnant”. Unwanted sexual contact occurred from once a fortnight to two to three times a week, and involved anal and vaginal penetration by his fingers and penis.

Fiona reported that her father used both force and coercion to make his daughter do what he wanted. He called her a slut and said that she deserved it. He also used his position as a minister and said that she was dirty and unforgivable by

God. He threatened “worse will happen if you do tell. No one will believe you anyway”. This prophecy came true when Fiona disclosed her abuse to her mother when she was four or five years of age. Her mother didn’t believe her, said that she was a liar and a slut, and dirty. Fiona thought that she should have understood, particularly as she was a GP, and told her again when she was in early primary school, but to no avail. In this way it was ensured that the sexual contact was a well-kept secret. Fiona said that the effect on her was great. She knew the contact was wrong and said that she dissociated a lot. She also said that “gains made were attacked” and that she worried about pregnancy.

At times Fiona’s father would use sexual abuse as a punishment. Fiona said that she could distinguish these times from other sexual abuse by the violence attached. An example of this occurred when Fiona was 17 years of age and was living at home again. One night she came home after curfew. Her father punished her by orally and vaginally raping her because she broke curfew and lied about where she was. For the first time Fiona verbally fought back. Afterwards she was concerned about being pregnant and also becoming Hepatitis C positive, as she knew her father had Hepatitis C.

In adulthood Fiona had had four admissions to psychiatric hospitals for depression and suicidal behaviour. Her most serious suicide attempt was while she was in a psychiatric hospital. Since the age of 15 or 16 Fiona had been engaging in self-injurious behaviour involving cutting and burning her arms with cigarette butts. She described having flashbacks of her abuse, which were triggered by the ECT and experience of being in the High Dependency unit of a psychiatric hospital.

Fiona described her rheumatoid arthritis as a positive event in her life, as it was “another life crisis”. Regarding her arthritis she said “I don’t think it’s a coincidence that I’ve hated my body for 18 years and I get rheumatoid arthritis”. She described having very supportive friends and an adopted family as being very important to her stability and well being. Fiona also described herself as a lesbian and gained significant support from the lesbian community.

### Analysis

Fiona described a very severe childhood history of trauma. Despite this, her MMPI-2 profile was the flattest one of the sample, and most of her elevations were in the high rather than very high range. Fiona’s resilience and resourcefulness in seeking professional and social supports may have aided some personality integration in early adulthood. However, a reliance on the defense of dissociation is indicated from both Fiona’s DES score and from discussions.

Fiona put her name on the questionnaire for Study 2 and said that her diagnosis had been changed from BPD to depression since she had taken part in study one. Although not as extreme as others in the sample, Fiona’s MMPI-2 profile is consistent with the diagnosis of BPD rather than depression. The change in diagnosis to depression may reflect a dominance of the psychic numbing aspects of PTSD. However, the change in diagnosis may also represent resourcefulness in working towards getting the help that she needs. At the time of her participation in the research she was well aware of the stigma surrounding a diagnosis of BPD in the health system. Fiona was also aware that she had this diagnosis since she had asked to read her file when last in hospital. Analysis of Fiona’s case therefore indicates that



resilience may be a protective factor for personality difficulties as a result of a traumatic childhood.

#### 4.4.5 Summary of Qualitative Analysis

It can be seen from the analysis of individual data that there was considerable complexity in the histories of the participants with BPD. Although all were common in reporting very distressing and traumatic childhood histories, each person's was somewhat different, and the resulting trauma has correspondingly been expressed in different ways in adulthood.

Qualitative analysis of the negative correlation between reported dissociation and reported trauma found that participants appeared to experience the range of PTSD. Analysis also revealed that some participants present a clinical picture characterised by a dominance of symptoms from either the overwhelming or psychic numbing categories. Qualitative analysis of the case material has therefore shed light on the negative correlation between dissociation and trauma found through quantitative analysis of results. Results show that trauma was positively related to PTSD symptomatology but not to dissociation alone in every case. It was not useful to separate dissociation as a single indicator of PTSD. It is possible that there are two typology's of PTSD in patients diagnosed with BPD — one dominated by the overwhelming constellation of symptoms and one dominated by the psychic numbing constellation of symptoms.

Contrary to quantitative results, which indicated that one person was not emotionally neglected in childhood, analysis of the individual case suggests that this person did in fact suffer emotional neglect. This result also raised questions regarding the reliability and validity of the TAI.

Finally, analysis of individual results also brought forward both conceptual and methodological issues to be addressed. These were:

#### Methodological issues

1. Participants with BPD have PTSD symptoms from adult experience of trauma as well as childhood experience of trauma.
2. Reliability of the TAI is difficult to establish. Until reliability can be established then the validity of TAI results may be open to question.

#### Conceptual issues

1. Participants may have amnesia for traumatic experiences in their past.
2. Lower levels of dissociation is not an indicator of lower severity of post traumatic stress in people diagnosed with BPD and a childhood history of trauma. Rather, participants with BPD and childhood trauma history appear to present with a dominance of one category of PTSD symptoms over the other, and also an equal mixture of both.
3. Psychotherapy may reduce the incidence of dissociation in people diagnosed with BPD.
4. Social support can reduce the effects of trauma.

### 4.5 Summary

The main findings from qualitative and quantitative analyses of the data are:

- That the 10 participants with BPD reported that they suffered significant abuse, neglect, separation and loss, and chaos in the family of origin.
- The entire sample were experiencing significant dissociative and post traumatic stress symptomatology.

The entire sample showed the 'inverted V' of the validity scales of the MMPI-2.

- The entire sample showed a high number of elevations of the clinical scales on the MMPI-2.
- The entire sample showed elevations on scales 2 (Depression), 4 (Psychopathic deviate), 7 (Psychasthenia) and 8 (Schizophrenia).
- Severity of childhood trauma was positively related to severity of MMPI-2 clinical profile and post traumatic stress symptomatology.
- Reported dissociation was negatively correlated with reported severity of childhood trauma. Likely explanations have been canvassed. It is suggested that typology's of PTSD be developed and resilience to be measured.

These results will be discussed further in the next chapter.

## CHAPTER 5

### DISCUSSION

#### 5.1 Quantitative Results

##### 5.1.1 Hypothesis 1: People Diagnosed with BPD have a History of Childhood Trauma

Results show that 100% of the sample had suffered some type of traumatic experience in childhood. In light of these results, the first hypothesis, that people diagnosed with BPD do have a history of childhood trauma, was supported. However, as this was a small sample consisted entirely of women, the results apply only to women diagnosed with BPD, and can only be taken as tentative.

The results compare to other studies that have used the TAI (e.g. Herman et al., 1989; Saxe et al., 1993). Herman and her colleagues found that 81% of a BPD group had suffered childhood trauma (Herman et al., 1989). Saxe and his colleagues found that 100% of a sample of 15 which included 10 diagnosed with BPD, reported childhood trauma histories on the TAI (Saxe et al., 1993). The 19% in Herman's study of a mixed sex sample who did not report childhood trauma may be accounted for by sex differences in levels of reported abuse in males and females—males tend to report less abuse in childhood than females (e.g. Brown, 1993; Herman et al., 1989). The Herman study also focused on childhood sexual and physical abuse and

witnessing domestic violence, and therefore did not include the broad range of experiences that were revealed in the present study.

### A. Abuse as Trauma

Ninety percent of the sample suffered physical or sexual abuse or witnessed domestic violence before the age of 16 years. This is a very high incidence, but is comparable to other studies (e.g. Herman et al., 1989; Saxe et al., 1993; Fonagy et al., 1996).

The finding that 90% of the sample reported sexual abuse in childhood is higher than other studies. For example, using the TAI, Herman and her colleagues found that 67% of their sample with BPD reported suffering sexual abuse (Herman et al., 1989). Other studies have varied in incidence of reported sexual abuse from 65% (Fonagy et al., 1996), 65% (Shearer, 1994), and 29.5% (Oldham et al., 1996), in adults diagnosed with BPD, to 24% in a sample of latency aged children with borderline pathology (Guzder et al., 1996). The samples in the above studies were mixed, and men tend to report less childhood sexual abuse than women do (e.g. Herman et al., 1989; Brown & Anderson, 1991). This may account for the higher finding in the present research. This is supported by rates of childhood sexual abuse comparable to those found in the present study reported for a sample of women diagnosed with BPD (Paris, Zweig-Frank & Guzder, 1994). Therefore, the higher rates of sexual abuse found in this research may be accounted for by the female only nature the sample.

Another possible reason for a higher incidence of childhood sexual abuse in the research is the possibility that clinicians referred patients with a history of childhood sexual abuse, despite being encouraged not to take this into account. It is

also possible that patients are identified as having BPD primarily based on a history of childhood sexual abuse (Brown & Anderson, 1991), and were referred to the research on that basis. As the BPD diagnosis is somewhat connected in clinicians' minds with childhood sexual abuse (Brown & Anderson, 1991) the results for samples with other types of abuse may be expected to be less contaminated by clinician's expectations.

The level of disturbance in the present sample, as indicated by the presence of multiple psychiatric hospitalisations and DES scores, cannot account for the finding of higher rates of sexual abuse in the present study compared to other studies. Many of the findings of lower reports of childhood sexual abuse came from samples of psychiatric inpatients diagnosed with BPD (e.g., Herman et al., 1989; Paris et al., 1994; Oldham et al., 1996). The present finding is in line with findings from the Saxe study, where the sample of 15 were diagnosed with Dissociative Disorders, representing a high degree of disturbance (Saxe et al., 1993). Therefore, there is no evidence to suggest that the present research sample is more or less disturbed than samples used in comparable studies.

The levels of physical abuse that the participants reported (80%) are similar to those reported in other studies. Incidences of physical abuse have been reported at 71% (Herman et al., 1992) and 89% (Fonagy et al., 1996). Generally participants diagnosed with BPD have reported suffering more childhood physical abuse when compared to non-borderline psychiatric inpatients of all ages: adult (Weaver & Clum, 1993), adolescent (Ludolph et al., 1990), and latency aged children (Guzder et al., 1996). Therefore, the experience of physical abuse is common to borderline pathology across the age groups.

The level of reported physical abuse and the finding that 90% of the participants witnessed domestic violence reflects the high level of violence reported in the family environment of the participants. This finding is higher than reported in other studies, e.g., 62% (Herman et al., 1989); 71% (Saxe et al., 1993); 47% (Shearer, 1994). However, patients diagnosed with BPD have been found to witness more domestic violence than patients without BPD (Weaver & Clum, 1993). It is difficult to account for the discrepancy in reported witnessing of domestic violence. The high incidence of having a family member who abused alcohol (70%) may have increased the incidence of violence in the home. Also, the rapport between interviewer and participant may have elicited more reported witnessing of domestic violence, or witnessed incidents may have been easier to talk about than incidents in which the participant was involved. Questions regarding witnessing violence came after those regarding extent and severity of physical punishment. It may be conjectured that participants may have been relieved to move on from their own experiences of violence to those that happened to others in the family, and reassure themselves that they were not the only one's affected. However, if factors such as these were involved they would be expected to have been reflected in the studies by Herman and Saxe and their colleagues, as both studies also used the TAI (Herman et al., 1989; Saxe et al., 1993).

There may have been differences in rapport in the interview situation with participants. In the Herman study it is possible that participants under-reported trauma experience to the male interviewer (van der Kolk) than the female (Herman), perhaps particularly sexual abuse. Interviews in the Saxe study were conducted by one of five psychiatrists, and the sex of the psychiatrists is not specified. It is possible

that the sex of the interviewer is a variable in results of adults reporting childhood trauma history.

### B. Neglect as Trauma

The BPD participants in Saxe's study all reported neglect (Saxe et al., 1993), which is in accordance with findings from the present study that 100% of the sample reported some type of childhood neglect. Smaller proportions of participants reporting neglect have been reported in other studies (e.g. 45%, (Oldham et al., 1996); 44% (Ludolph et al., 1990); and 29% (Shearer, 1994). The lack of a clear and standard definition or measure of neglect in the research may account for these discrepancies. The present research used the same definition used in the Saxe study; namely that neglect occurs when the caretaker has grossly neglected the child's physical or emotional needs (Perry et al., 1992). Examples of neglect included not providing safety from harm and adequate food and shelter, not attending to the child's emotional distress or completely withholding affection (Perry et al., 1992). The present study also scored situations where there was clear evidence of a failure to protect the child from the physical abuse or neglect (for example, Georgina's mother's failure to provide medical attention for her epileptic seizures because her father believed she was faking). Ludolph referred to neglect as a "failure to feed, clothe, or protect the child" (Ludolph et al., 1990), and her findings are therefore restricted to physical neglect. Neglect was not defined in the Oldham (Oldham et al., 1996) or Shearer (1994) studies, although the Shearer study also included a category of verbal or emotional abuse as well as neglect. Therefore the definition of neglect has included physical factors in most studies (where defined), whereas the role of emotional factors has been less clear.



Overall, results regarding neglect from the present research are most comparable to those of Saxe and his colleagues as the same measure was used in both studies (Saxe et al., 1993). In the Shearer (1994) study 52% of participants reported emotional or verbal abuse and 29% reported neglect. It is unclear how many of these participants reported both emotional or verbal abuse and neglect. This fact makes it very difficult to compare current results with the Shearer (1994) study.

Half the sample suffered physical neglect in the present research and 90% suffered emotional neglect. Qualitative case analysis revealed that the one participant who did not score emotional neglect did not come from a very emotionally supportive environment. Further probing may have resulted in a positive score for emotional neglect.

Most studies have not delineated between emotional and physical neglect. However, aspects of emotional neglect have been investigated in the families of patients diagnosed with BPD. For example, the parents of patients diagnosed with BPD have been found to be less caring and more controlling than parents of patients without BPD (Zweig-Frank & Paris, 1991). Weaver and Clum (1993) found that the families of patients diagnosed with BPD were less cohesive and less expressive, more conflictual and more controlling than families of patients without BPD. Guzder found that cumulative parental dysfunction—substance abuse, criminality, divorce, and multiple separations—was higher in a group of day-patient borderline children compared to day-patient non-borderline children (Guzder et al., 1996). In short, children and adults diagnosed with BPD generally report high levels of family dysfunction, including neglect, over-control, substance abuse, and conflict.

Thus it would appear from the research that emotional neglect is more salient than physical neglect. In order for research findings to be truly comparable in future it is important that a consistent and comprehensive definition of neglect be put forward. Present research results and the phenomenology of BPD suggest that a definition of neglect that does not include emotional factors is inadequate in describing the experience of patients diagnosed with BPD.

### C Separation and Loss as Trauma

A significant majority—90%— of the participants reported either separation or loss, or both, in childhood, with half the sample experiencing a significant loss. These results are comparable to Saxe's finding that 80% of their sample of patients with dissociative disorders, two thirds of whom had BPD, reported significant loss or separation in childhood on the TAI (Saxe et al., 1993).

There has been surprisingly little research documenting experiences of separation and loss in people diagnosed with BPD. This is particularly surprising considering the importance of separation and loss to Kernberg's theory (Kernberg, 1975), and the diagnostic criteria of "frantic efforts to avoid real or imagined abandonment" (APA, 1994, p. 650). Weaver and Clum (1993) found no difference between BPD and non-BPD patients in terms of experiences of separation and loss. However, the non-BPD group had depression, which is one of the major differential diagnostic categories for BPD in DSM-IV and has been found to commonly co-exist with BPD (APA, 1994). It is possible that separation and loss may cause the same type of psychopathology that coexists in BPD and depression. Indeed, families of patients with both depression and BPD have been said to be characterised by parental loss by death, separation or divorce (Beatson & Chopra, 1988).

Although separation and loss have not differentiated BPD from depression, these experiences have been found to successfully differentiate BPD from other diagnostic groups. Ludolph found that parental loss, number of surrogate mothers and fathers, and number of relocations were more in adolescent patients diagnosed with BPD than adolescent patients without BPD (Ludolph et al., 1990).

Consequences of separation and loss may therefore be important in the histories of patients diagnosed with BPD, and can differentiate patients diagnosed with BPD from other diagnostic groups. Childhood experiences of separation and loss may have a similar aetiological role in the formation of BPD as in depression

### C. Chaos as Trauma

The findings that the families of patients diagnosed with BPD are characterised by separation and loss (e.g. Beatson & Chopra, 1988), and are significantly more abusive and violent than families of those without BPD (e.g. Herman et al., 1989; Fonagy et al., 1996; Weaver & Clum, 1993) are entirely consistent with the present findings. Seventy percent (70%) of the participants described family environments that were chaotic, in which they could not depend upon a normal routine taking place at home. This finding compares well with that reported in Saxe and his colleagues study using the TAI of 86% of the sample reporting chaos (Saxe et al., 1993).

Although chaos has not been identified specifically in other studies, it seems to be a useful amalgam of constructs used in research. For example, chaos may include the variables of parental substance abuse, criminality (Guzder et al., 1996), grossly inappropriate parental behaviour, and psychiatric illness in a parent (Ludolph et al., 1990). It may be concluded that female adults diagnosed with BPD had a childhood

where they were not able to rely on factors such as parents being there, caring for them physically and emotionally, protecting them from harm, providing them with food and clothing and behaving with some degree of continuity.

#### 5.1.1.1 Developmental Data

Not only did the sample report significant childhood trauma; they reported it starting at a very young age. For most participants, experiences of trauma tended to peak in latency for physical abuse, witnessing violence, separation and loss. Other categories of trauma—sexual abuse, physical and emotional neglect and family chaos—were relatively stable across age categories. Other studies have also found reports of physical abuse peaking in latency (e.g. Herman et al., 1989; Weaver & Clum, 1993; and Saxe et al., 1993). The study by Weaver and Clum found that reports by adults diagnosed with BPD of physical and sexual abuse and witnessing violence all peaked in latency (Weaver & Clum, 1994). Saxe also found that reports of physical abuse and witnessing domestic violence peaked in latency, but not sexual abuse or separation and loss (Saxe et al., 1993). Therefore, although some experiences of trauma maybe relatively stable, their experiences are more prevalent at different ages, specifically peaking in latency, between the ages of 7 and 12 years. According to psychoanalytic theory, it would be expected that traumatic experiences would peak in infancy, thus causing disruption to the separation-individuation stage of development (Kernberg, 1975). The finding of peak traumatic experience in latency, therefore, is not predicted by theory. According to Kernberg's theory, traumatic experiences in latency would be expected to interrupt the formation of ego identity (St Clair, 1986). According to Kernberg's theory "ego identity continues to evolve [in latency] by a process of reshaping experiences with external objects in light

of internal object representations, and these internal object representations are reshaped in light of experiences with actual persons" (St Clair, 1986, 134). Peak trauma experiences in latency would therefore theoretically grossly interrupt this aspect of personality development.

Herman's findings for physical abuse across the age groups of infancy, latency and adolescence of 33%, 71% and 62% respectively (Herman et al., 1989) compare well with results from current research (20%, 70% and 60% respectively). However, findings from the present research differ considerably in terms of sexual abuse, with Herman's study reporting 19%, 33% and 52% across the developmental categories, and the present finding of 60%, 70% and 70% respectively. This is a substantial difference, considering that both samples were mainly women diagnosed with BPD (100% in the present research and 81% in Herman's sample (Herman et al., 1989)), and both studies used the TAI. Again, it is possible that clinicians referred participants to the present research with an impression that childhood trauma history added to the participants' suitability.

There were also differences found between the present research and Herman's study (Herman et al., 1989) in terms of the incidence of witnessing violence across the developmental age categories. The present research found similar witnessing of domestic violence in infancy (40% in the present research compared to 33% in Herman's study). However, the present research found 70% of participants had witnessed violence in latency, and 60% had witnessed violence in adolescence. These results are somewhat higher than those reported by Herman of 48% in both latency and adolescence (Herman et al., 1989). It is difficult to account for the discrepancy beyond individual differences in small samples.

Saxe and his colleagues also used the TAI in his study of patients diagnosed with BPD (Saxe et al., 1993). Results from the present research differed from Saxe's study in a number of areas. The present sample was found to have suffered less physical abuse in infancy (20% compared to 50%), more sexual abuse in infancy (60% compared to 40%), less sexual abuse in adolescence (70% compared to 90%), less chaos in adolescence (60% compared to 86%), and more separations in adolescence (70% compared to 33%). The many more separations in adolescence in the present study were primarily due to the participants' leaving home. If the participants had left home then they would likely have suffered less chaos and sexual abuse in adolescence, considering parents or family members were the main perpetrators. It may be easier to leave home in adolescence in Australia than in the USA, perhaps due to the welfare system, where homeless people are given government financial support, or even the generally mild climate that allows "sleeping rough" without freezing.

### Summary

Findings from the present research support Hypothesis 1 and confirm other research showing that people diagnosed with BPD report significant levels of childhood trauma, including sexual abuse, physical abuse, neglect, separation and loss and chaotic family environments (e.g. Herman et al., 1989; Ludolph et al., 1990; Saxe et al., 1993; Fonagy et al., 1996).

The results from the present research also showed that patients diagnosed with BPD described a variety of traumatic experiences over a long period of time. The experiences were thus cumulative and nested, particularly considering the finding

that some traumatic experiences peak in latency, while others remained at high background levels.

### 5.1.2 Hypothesis 2: Post Traumatic Stress Symptomatology

Results of the DES and MMPI-2-PK and PS support Hypothesis 2: people diagnosed with BPD have dissociative and post traumatic stress symptomatology.

The extreme elevations on the MMPI-2-PK and PS scales across the sample clearly point to the presence of PTSD (Litz et al., 1991; Miller et al., 1995). All participants scored in the clinically significant range, and the mean score was in the very high range for both scales. These results indicate that the MMPI-2 can be routinely used to assess the presence of post traumatic stress symptomatology in people diagnosed with BPD.

The present findings on the PK and PS scales are similar to those found in a study of psychiatric patients who reported suffering ritual abuse in their childhood (Noblitt, 1995). This study found that patients who reported ritual abuse scored mean T-scores of 86.3 and 85.8 respectively on the PK and PS scores, compared to 58.3 and 58.7 for patients who did not report abuse (Noblitt, 1995). These results are slightly lower, but compare well to the means of 91.8 and 91.2 for the PK and PS scores in the current research. The results also provide further support for the use of the MMPI-2-PK and PS scales in assessing post traumatic stress in psychiatric patients who had histories of childhood trauma.

Results from the DES illustrate that the participants generally experienced high levels of dissociation in everyday life. The present finding of a mean DES score of 31.4 was significantly higher than those from non-psychiatric populations (Carlson & Putnam, 1993). It was also lower than has been reported for dissociative disorders,

for example, 36.1 (Saxe et al., 1993), and higher than that generally reported for BPD. Mean DES scores for BPD have ranged from 15.8 (Lauer et al., 1993), to 25.02 (Shearer, 1994). These results raise the possibility of concurrent dissociative disorders in some participants.

The possibility of a concomitant dissociative disorder is particularly relevant considering research findings of the overlap between BPD and dissociative disorders (e.g. Saxe et al., 1993), including MPD (Lauer et al., 1993). A review of research findings on the DES found mean scores for Dissociative Disorders Not Otherwise Specified ranging from 29.8 to 40.8, and mean scores for DID ranging from 42.8 to 55 (Carlson & Putnam, 1993). Four of the participants in the present research scored over 29, three scored over 43, and one scored over 55. These results provide strong indications that as many as 40%, and as few as 10%, of the sample may have met the criteria for a dissociative disorder, including DID.

The DES results also testify to the severity of the psychiatric symptomatology in the sample. The present sample had one score of 69, which was higher by at least 20 than any other score. If this participant's score is taken out of the equation, a mean score of 27.2 and standard deviation of 11.78 is found. This result is similar to the mean of 25.02 found in Shearer's sample of 62 patients diagnosed with BPD, 14 of whom were diagnosed with DID (Shearer, 1994). The participant who scored 69 may have a concomitant Dissociative Disorder, and reflect research findings of an overlap between DDs and BPD (e.g. Shearer, 1994; Saxe et al., 1993; Marmer & Fink, 1994).

The mean DES score of 31.4 in the present study is similar to those cited for PTSD in a review of DES findings (Carlson & Putnam, 1993). People with PTSD



tended to score means between 26 and 30, while people diagnosed with BPD tended to score around 20 (Carlson & Putnam, 1993).

The present research has therefore found higher levels of dissociation in the participants than found in other studies of BPD (Brodsky et al., 1995; Lauer et al., 1993) and are more in line with studies of PTSD and possibly DID (Carlson & Putnam, 1993).

The sample also reported self-injurious behaviour, with cutting and poisoning or overdosing being the most common methods. Experiences of childhood trauma have been found to predict adult self-injurious behaviour, and self-injurious behaviour has in turn been found to be related to dissociation (van der Kolk et al., 1991). The finding that cutting was the most common method—90% of the sample had cut themselves—may reflect the high levels of neglect reported by the sample. Van der Kolk and his colleagues have found that cutting was strongly associated with neglect in childhood, while suicide attempts were strongly associated with childhood trauma, particularly sexual abuse (van der Kolk et al., 1991). The relationship between childhood trauma, self-injurious behaviour and dissociation suggests self-injurious behaviour can be conceptualised as a reaction to trauma—in reliving pain and illustrating inner pain in a concrete (non-symbolic) way—and is considered a manifestation of post traumatic stress.

### 5.1.3 Hypothesis 3: Adult Personality Profile

Hypothesis 3 is supported in regard to the MMPI-2. Results were not conclusive regarding the Rorschach Test.

The 'inverted V' in the validity scales found for all participants in the present research is one of the most reliable findings in the MMPI profiles of people diagnosed with BPD (Gartner et al., 1989).

The consistency in validity scales and conformity with the literature on the number of elevations across the clinical scales indicates that participants diagnosed with BPD have a consistent personality profile on the MMPI-2.

The present research found an average of 7.5 elevations, which is higher than the average found in a review of over 14 studies by Gartner and his colleagues (Gartner et al., 1989). The higher average in the present research may be due to individual differences in the small sample; for example, elevations on scale 1 (Hypochondriasis) may reflect the poor health of the sample. The higher average may also be due to the focus in the present study on Axis II pathology only. Any co-existing Axis I pathology may increase the number of elevations on the clinical scales. There is evidence that at least one participant may have had a concurrent Dissociative Disorder (number nine), and another participant's diagnosis was changed to Depression after her participation in the research (number six). Future research using the MMPI-2 and BPD should investigate the influence of Axis I pathology on MMPI-2 profiles of BPD. Notwithstanding the influence of Axis I pathology, the present results contribute to a growing body of evidence for multiple elevations on the MMPI-2 as a diagnostic factor of BPD.

It is possible that the childhood abuse history of the sample may have been reflected in the number of elevations on the clinical scales of the MMPI-2. Research with women who have been sexually abused in childhood, but do not necessarily have a diagnosis of BPD, tends to show five elevations in the clinical scales of the MMPI-2

(Nash et al., 1993). This study was restricted to sexual abuse histories only, and sexual abuse itself was narrowly defined; sexual abuse with perpetrators at least five years older and contact "must involve at least genital manipulation to orgasm of, or by, the child" (Nash et al., 1993, p. 277). The present sample suffered significant trauma beyond and including childhood sexual abuse. The more extreme trauma experiences of the present sample may have been reflected in the increase in elevations of the clinical scales of the MMPI-2.

A uniform result was also found regarding the specific scales that were elevated. The entire sample scored elevations on scales 2 (Depression), 4 (Psychopathic Deviate), 7 (Psychasthenia), and 8 (Schizophrenia). These are similar to those found in a review of up to 13 studies of the MMPI-2 and BPD, which found that almost all studies reported elevations above  $T=70$  on scales 8, 4, 2, and 7 (Gartner et al., 1989). Therefore, both the numbers of elevations across the Basic scales and the specific scales elevated support the use of the MMPI-2 in diagnosing BPD.

Results from the Rorschach Test were mixed. Of the five participants who completed the Rorschach Test, three indicated difficulty in modulating affective expression and two were scored as having a less strict control of emotional expression than most people, as shown by the  $FC : CF + C$  ratio. These results confirmed results of other research using the Rorschach with patients diagnosed with BPD (Exner, 1986); with childhood sexual abuse history (Saunders, 1991); and with PTSD (van der Kolk & Ducey, 1989).

Two participants did not conform to research findings of colour dominated responses. However, the ratio was equal rather than in the direction of form based

responses, indicating a tendency to be more obvious in expressing feelings, which tend to be extreme when expressed, than most adults (Exner, 1993a).

The results of colour dominated responses are consistent with the diagnostic criteria for BPD, particularly the criteria of "affective instability due to a marked reactivity of mood: and "inappropriate, intense anger or difficulty controlling anger" (APA, 1994, p. 650). The Rorschach results suggest the intensity of emotion is not restricted to anger, however, but applies to most feelings. The intensity of emotion was consistent with the high elevations on most of the Clinical scales of the MMPI-2.

The findings of two protocols showing a definite extratensive style and three showing an ambitent style are also consistent with research findings on BPD (Exner, 1986) and PTSD (van der Kolk & Ducey, 1989). These findings are also consistent with the phenomenology of BPD. The extratensive reliance on the outside world, combined with difficulty in controlling emotions, would contribute to the identity difficulties noted in people diagnosed with BPD (APA, 1994). Identity difficulties were also reflected on the MMPI-2 by the number of elevations on the Clinical scales and the high F scale. A high number of elevations indicates a difficulty in saying 'yes' or 'no' to questions, reflecting an uncertainty of self. With the external world changing rapidly and difficulties in controlling which feelings are expressed and the strength of that expression, maintaining a consistent sense of self would be difficult in the extreme.

Three people showed an ambitent style, which is contrary to Exner's (1986) research findings for BPD and van der Kolk's (van der Kolk & Ducey, 1989) findings in a sample with PTSD. Both of these studies report that significantly more patients showed the extratensive style. With the present small sample a firm conclusion cannot

be drawn. Nevertheless, the finding of three ambivalent protocols is interesting, and not inconsistent with the phenomenology of BPD. People showing an ambivalent style tend to be inconsistent with regard to the impact of emotions on thinking in different situations (Exner, 1993b). Therefore, in one situation a person may seem quite level headed and make decisions with little input from his or her feelings. A similar situation on another day may see quite the opposite, with a seemingly impulsive decision made on the basis of feeling alone. This description is reflected in the impulsive behaviour and relationship difficulties common in people diagnosed with BPD (APA, 1994), and by the over-endorsement of MMPI-2 items. The results described above are consistent with BPD in reflecting impulsivity in behaviour and emotional expression, and relationship and identity difficulties.

The finding that the adjusted D scores on all five of the protocols were equal to or greater than 0 is not consistent with either previous research findings (Exner, 1986; van der Kolk & Ducey, 1989) or diagnostic criteria for BPD (APA, 1994). These results indicated that the five women were able to tolerate stress as much as most people. A reliability check for the Adjusted D score is provided by the Experience Actual (EA) score (Exner, 1993a). One protocol showed an average EA score, and three protocols showed above average scores. These EA scores support the validity of the Adjusted D score, and therefore the conclusion that the participants had sufficient stress tolerance and capacity for control as most people (Exner, 1993a). One case, number three, showed a below average EA score, which indicated that she may have been chronically vulnerable to becoming disorganised in conditions of even minor stress that come with living in a complex modern society (Exner, 1993a).

The current Rorschach results therefore may reflect the capacity to cope. The curious and unexpected results of reasonable capacity for control for four of the five participants who completed the Rorschach are difficult to understand in the context of the phenomenology of BPD. However, they may reflect resources available rather than actually utilised (Exner, 1993a). It is also important to keep in mind that the participants have, in some capacity, dealt with the overwhelming stress of childhood trauma. Their survival provides a timely reminder of their capacity to survive extremely stressful situations. If situations of childhood trauma are where coping skills first develop, those skills may not be easily transferable to everyday situations. This does not mean that the participants have no coping skills; on the contrary, their coping skills may be more developed for specific situations than most people's, but may be maladaptive to 'normal' situations.

Overall results from the small number of Rorschach protocols are mixed. In some respects they conform to previous research with patients diagnosed with BPD (Exner, 1986); PTSD (van der Kolk & Ducey, 1989); and with childhood trauma histories (Saunders, 1991). However, the Adjusted D finding in particular is unusual, and may simply be due to the small sample size and perhaps would be corrected if further protocols were taken. It may also reflect the presence of coping resources that are not being utilised. The findings remain clinically relevant in the suggestion that the capacity to cope may be present but not utilised. This is in accordance with the fact that the participants all suffered significant childhood trauma and survived to be neither psychotic nor autistic in adulthood. This illustrates their capacity to cope with traumatic experiences and survive.

#### 5.1.4 Hypothesis 4: Severity of Childhood Trauma History will be Positively Related to Dissociation, Post Traumatic Stress Symptomatology, and Severity Of MMPI-2 Clinical Profile.

Hypothesis 4 was conditionally supported. Severity of childhood trauma history was positively related to PTSD symptomatology and intensity of adult personality difficulties, as measured by the number of elevations on the Clinical scales of the MMPI-2. However, severity of childhood trauma history was not related to the degree of dissociation.

The finding that the childhood trauma history was positively related to PTSD symptomatology indicates that as severity of trauma increases, so too does severity of post-traumatic-stress symptomatology. This finding makes intuitive sense, and has been long accepted in the study of PTSD related to soldier's experience in combat. According to Herman, it was accepted as early as World War Two that "psychiatric casualties could be predicted in direct proportion to combat exposure" (1992, p. 25). Recently there has not been research linking severity of childhood trauma with severity of adult PTSD. However, the present findings place childhood trauma experiences on a par with research findings of war experiences.

It is possible that the positive correlations between results of the MMPI-2 and the TAI is related the nature of the measures. The two tests seem to tap into related constructs: current thoughts about past events which influence current symptoms on self-report measures. Possible relationship between constructs of retrospective measures and current symptom measures should be investigated further.

The bulk of the research looking at childhood trauma history and symptomatology in adults diagnosed with BPD has focused on dissociation and has

found that dissociation correlated positively with trauma experience (e.g. Herman et al., 1989; Brown & Anderson, 1991; Saxe et al., 1993; Zweig-Frank et al., 1994; Brodsky et al., 1995). That finding was not replicated in the present research. Indeed, it was found that dissociation correlated negatively, but not significantly, with the measures of severity of trauma and post traumatic stress symptomatology, and negatively and significantly with the number of MMPI-2 elevations.

The DES findings in the current research cannot be explained by reliability of the DES, as it was found to have a reliability coefficient of .88 for the present sample. The sample size was small, and therefore individual differences were more apparent. The results may reflect a two-way effect of PTSD of dominance of overwhelming and intrusive symptoms versus dominance dissociative or psychic numbing or avoidance symptoms. A diagnosis of PTSD requires symptoms from both categories (APA, 1994). A larger sample may therefore have resulted in a more bell-shaped curve, reflecting some people experiencing extremes of avoidance, some experiencing extremes of intrusive symptoms, and the bulk experiencing a mixture of both. The case studies serve to remind that grouped results may disguise 'clinical types'.

The significant negative correlation between dissociation and the number of elevations on the MMPI-2 and the MMPI-2-PK and PS scales may also reflect a two-way effect of PTSD. People who were at the low dissociation end of the continuum were experiencing overwhelming and intrusive symptoms, and therefore endorsed positive symptom items on the MMPI-2. People at the high end of the dissociation continuum experienced the psychic-numbing constellation of PTSD symptoms, and therefore did not endorse as many positive items on the MMPI-2.



Although the negative correlation between the DES and all other measures may be understood in terms of the experience of PTSD, the findings are at variance with almost all other research findings using the DES with people diagnosed with BPD. It is possible that the relationship between childhood trauma and dissociation is not purely linear and that there are other factors involved in the relationship. The present study's case study material shed light on the negative correlation between trauma history and dissociation and revealed both methodological and conceptual issues that contributed to the findings.

Case study analysis revealed the full range of PTSD presentations in participants', including a dominance of psychic numbing aspects, a dominance of overwhelming re-experiencing of the trauma, and a mixture of both. These findings show that the negative association found between childhood trauma history and dissociation is not an accurate indicator of the absence of PTSD in participants diagnosed with BPD and childhood trauma history.

A major conclusion to come from the case study material is that any investigation of an association between adult dissociation and childhood trauma history must take into account the possibility of adult trauma experience as a confounding variable. This variable has not been taken into account in research to date.

It is useful to consider research findings from the current study in light of identification of clinical types of PTSD (Alcaron et al, 1997). Alcaron and his colleagues proposed six clinical types of PTSD after reviewing the literature. The six types were; depressive, dissociative, somatomorphic, psychotomorphic, organomorphe and 'neurotic-like'. Results from the present research indicate that the

participants with higher dissociative and psychic-numbing symptoms fit the 'dissociative' type. Those with higher overwhelming and intrusive symptoms corresponded more with the proposed 'personality disorder' type, which included personality changes due to trauma experiences, and was put forward for further research (Alarcon et al, 1997). Van der Kolk's (1996) category of 'Disorders of Extreme Stress Not Otherwise Specified', proposed for DSM-IV, included categories of chronic characterological changes, alterations in regulating emotion, alteration in systems of meaning, somatization, and alterations in attention and consciousness. This category encompasses both overwhelming and psychic numbing symptomatology found in the current research, and takes into account characterological changes and the high levels of physical problems found in the sample (van der Kolk, 1996). Van der Kolk's (1996) category of DESNOS is similar to that of Herman's (1992) Complex Post Traumatic Stress Disorder, which will be discussed below.

The generally poor health of the participants was another variable identified that has not been extensively investigated in research. Two participants had severe health problems—Rheumatoid Arthritis and a major hormone disorder—and none of the women reported excellent health (see Chapter 3—Method). According to Cameron and Rychlak, somatization occurs where "unconscious conflict is linked with or transformed into a body symptom that reduces or accounts for anxiety by expressing the conflict symbolically" (1985, p. 233). At the end of the interview, Fiona said "it's no wonder I have Rheumatoid Arthritis—I have hated my body for years". Her comment provides strong anecdotal evidence that her illness, as noted by her, may have a strong psychological component. Other participants suffered illnesses that have been considered psychosomatic, such as asthma and stomach ulcers. Theory

argues that somatization is similar to dissociation in that anxiety is being cut off from conscious awareness (McDougall, 1989), and role in BPD is yet to be explored.

The findings from case analysis provide a reminder of the many variables operating in the relationship between trauma history, adult symptoms and personality profile. Some of the variables identified were social support and psychotherapy, offering a positive influence on dissociation and personality profile, and early maternal deprivation alone as a severe traumatic experience, in the relative absence of subsequent trauma experiences. The issue of vulnerability and resilience in childhood trauma and adult personality disorder has not been addressed sufficiently in research. Results from the present research point to importance of investigating vulnerability and resilience in helping further understanding adult BPD. Many variables are to be expected in a complex disorder such as BPD, which has developed over a long period of time to become a serious adult psychiatric disorder.

#### 5.1.5 Summary

Overall the results supported the hypotheses, with a few alterations. Hypothesis 1 was supported uncategorically. It was found that participants diagnosed with BPD had a history of childhood trauma, and that that history was generally wide-ranging, complex and severe. Hypothesis 2 was also supported unconditionally. It was found that participants diagnosed with BPD had dissociative and post traumatic stress symptomatology, and that these symptoms were also more severe than for non-psychiatric and also, in the case of dissociation, BPD populations when compared to other research findings (Carlson & Putnam, 1993). Hypothesis 3 was supported where it applied to the MMPI-2. The participants showed a consistent personality profile on the MMPI-2—both in number of elevations across the clinical

scales and specific scales elevated— which was consistent with previous research (Gartner et al., 1989), and provides support for using the MMPI-2 as a diagnostic tool for BPD. Results regarding personality profile on the Rorschach Test were inconclusive for such a small sample, but supported findings of a tendency for difficulties in controlling emotional displays and a tendency for inconsistent impact of emotions on thinking (Exner, 1986). Most of the sample was found to have normal capacities to tolerate stress, which did not confirm other research (Exner, 1986). Taken together, the results of the MMPI-2 and Rorschach indicate the outward identity disturbance, inner emotional instability, but maintenance of some inner capacity to cope with high stress levels and environmental demands.

Hypothesis 4 was also supported, except for the correlation of dissociation. Significant positive correlations were found between severity of childhood trauma history and severity of adult personality profile and severity of post traumatic stress symptomatology. No relationship was found between dissociation, severity of childhood trauma history and severity of post traumatic stress symptomatology. A significant negative relationship was found between dissociation and severity of MMPI-2 profile. This result may reflect a continuum of PTSD symptomatology whereby some participants experienced a dominance of overwhelming and intrusive symptoms leading to increase reporting on all measures, and some reported the dominance of psychic numbing symptoms. Psychic numbing may lead to under-reporting of childhood trauma, but may not be expected to impact significantly on the MMPI-2. This two-way effect of PTSD was supported through analysis of case material. Qualitative analysis also raised issues attesting to the complexity of BPD, and identified variables that have heretofore not been recognised in BPD research.

### 5.3 Conceptual Implications

#### 5.3.1 Theoretical Implications

The trauma experienced by the participants diagnosed with BPD seems to have been both cumulative (they have experienced a number of traumatic experiences over time), and nested (traumatic experiences in the context of traumatic experiences). It is important to return to theoretical understandings of BPD in light of the present research findings.

#### Herman's Trauma Theory

Herman's work in the conceptualisation of the effects of trauma provides a basis upon which to understand the phenomenology of BPD in terms of traumatic experiences. Herman's (1992) diagnosis of 'complex post-traumatic-stress-disorder' provides a framework for recognising the effects of long term trauma in a clinical population. In this way the diagnosis goes beyond PTSD in DSM-IV (APA, 1994), and accounts for long term character changes as a result of a long term post traumatic stress symptomatology (Herman, 1992).

The nature and extent of the participants' childhood trauma histories support Herman's (1992) theory of a traumatic aetiology of BPD. Some support has also been found for the diagnosis of 'Complex Post-Traumatic Stress Disorder' (Complex PTSD). The diagnostic criteria for Complex PTSD are shown in Table 13 below.

Table 13

Diagnostic criteria for Complex Post Traumatic Stress Disorder.

<p>1. A history of subjection to totalitarian control over a prolonged period (months to years). Examples include hostages, prisoners of war, concentration-camp survivors, and survivors of some religious cults. Examples also include those subjected to totalitarian systems in sexual and domestic life, including survivors of domestic battering, childhood physical or sexual abuse, and organised sexual exploitation.</p> <p>2. Alterations in affect regulation, including</p> <ul style="list-style-type: none"> <li>• persistent dysphoria</li> <li>• chronic suicidal preoccupation</li> <li>• self-injury</li> <li>• explosive or extremely inhibited anger (may alternate)</li> <li>• compulsive or extremely inhibited sexuality (may alternate)</li> </ul> <p>3. Alterations in consciousness, including</p> <ul style="list-style-type: none"> <li>• amnesia or hypermnesia for traumatic events</li> <li>• transient dissociative episodes</li> <li>• depersonalization/derealization</li> <li>• reliving experiences, either in the form of intrusive post-traumatic stress disorder symptoms or in the form of ruminative preoccupation</li> </ul> <p>4. Alterations in self-perception, including</p> <ul style="list-style-type: none"> <li>• sense of helplessness or paralysis of initiative shame, guilt, and self-blame</li> <li>• sense of defilement or stigma</li> </ul>
---

- sense of complete difference from others (may include sense of specialness, utter aloneness, belief no other person can understand, or nonhuman identity)

5. Alterations in perception of perpetrator, including

- preoccupation with relationship with perpetrator (includes preoccupation with revenge)
- unrealistic attribution of total power to perpetrator (caution: victim's assessment of power realities may be more realistic than clinician's)
- idealization or paradoxical gratitude
- sense of special or supernatural relationship
- acceptance of belief system or rationalizations of perpetrator

6. Alterations in relations with others, including

- isolation and withdrawal
- disruption in intimate relationships
- repeated search for rescuer (may alternate with isolation and withdrawal)
- persistent distrust
- repeated failures of self-protection

7. Alterations in systems of meaning

- loss of sustaining faith
- sense of hopelessness and despair (Herman, 1992, p. 121).

It can be seen from Table 13 that Herman's theory of Complex PTSD, although not specific to BPD, does reflect personality change in adulthood. However, it does not address the chronology of abnormal personality development throughout

childhood due to traumatic experiences. Nevertheless, all participants in the sample met most criteria for diagnosis of Complex PTSD. Nine of the ten participants in the current research met criteria one, and all met criteria's two and three, on the basis of self-harm and dissociation respectively.

Criteria's four through seven are difficult to assess using the current data. However, case analysis has shown that participants one and two referred to shame and guilt (criteria four), participants two, seven and four referred to difficulty in forming trusting relationships or failures of self protection, (criterion seven) and participants five and seven referred to feelings of hopelessness (criterion seven). There was no evidence from the data that any participant met criterion six.

Although the participants met most of the criteria for Complex PTSD, the diagnosis does not reflect abnormal personality development resulting in an adult personality disorder. Criteria of 'alterations in relations with others' (number six) and 'alterations in systems of meaning' (number seven) in particular imply that something already in existence has been altered but do not expand on the concept of abnormal personality development from infancy or latency due to abnormal conditions. However, the diagnosis of Complex PTSD has made a strong contribution to establishing BPD and other disorders as being based on trauma, , and reflects the range of psychopathology that may arise from such experiences. The theory also has strength in remaining close to empirical data. Although the diagnosis accounts for long term personality changes, it does not really account for the type of abnormal personality that has been given the label of personality disorder. Nevertheless, it provides a framework for understanding the traumatic effects of childhood trauma



seen in people diagnosed with BPD without the pejorative connotations that the diagnosis of BPD has attracted over the years.

### Linehan's Dialectical Behaviour Therapy

Some support was found for Linehan's biosocial theory of BPD from results of the present research (Linehan & Kehrer, 1995). The finding that three participants indicated a difficulty in controlling, or were impulsive in, emotional displays on the Rorschach supports Linehan's theory of the centrality of emotional dysregulation to BPD.

The Rorschach findings of two protocols showing a definite extratensive style and three protocols showing an ambitent style also provides some support for Linehan's theory of BPD (Linehan & Kehrer, 1995). The extratensive participants would be expected to predominantly rely on feelings when making decisions, while ambitent participants would be expected to oscillate between basing decisions on thinking and on feeling, varying between situations. With an inconsistent impact of feelings on thinking, and a reliance on their external resources, maintaining a consistent sense of identity would be difficult. This difficulty is somewhat reflected in Linehan's concept of emotional dysregulation in its impact on identity: the theory states that difficulty in controlling emotions makes it difficult to maintain identity (Linehan & Kehrer, 1995).

The findings of extensive childhood trauma histories, including neglect, in the sample provide tacit support for Linehan's concept of the invalidating environment (Linehan & Kehrer, 1995). However, Linehan's concept of the invalidating environment involves a direct negation of the child's experience through things such as mislabeling emotions, the suggestion that problems can be easily solved, and

reacting to emotional displays with blame or punishment. The relationship between the child and parents was not investigated in this study, but the study highlighted the difficulty in quantifying subtleties of emotional abuse. Although the concept of an invalidating environment goes some way to include emotional neglect, the theory seems to ignore the basic threat to integrity that childhood trauma and neglect represent. Current research findings support the concept of an invalidating environment—invalidating of the child's right to a safe and secure place in which to develop a coherent personality and sense of self—through the negation of the child's experience, but also through the direct effects of trauma and neglect.

The invalidating environment is one aspect of Linehan's (Linehan & Kehrer, 1995) theory that does not give sufficient weight to findings of childhood trauma history for patients diagnosed with BPD. Childhood trauma history is also not sufficiently taken into account in the theoretical development of emotional dysregulation. Linehan theorised that emotional dysregulation develops through environmental factors such as traumatic childhood events, and biological factors such as temperament and genetic make-up (Linehan & Kehrer, 1995). It can be said that an individual's temperament and genetic make-up play a role in everything that he or she does, and there does not seem to be sufficient weight given to childhood trauma history, or to resilience in the face of such trauma, in the development of emotional dysregulation. Linehan also does not investigate whether adults diagnosed with BPD had a different temperament or genetic make-up to patients who did not develop BPD.

The unexpected result of a negative association between trauma and dissociation may reflect Linehan's (1993) dialectical dilemma of 'inhibited grieving

versus unrelenting crises'. According to Linehan's theory, patients diagnosed with BPD tend to oscillate between the extremes at each end of the three dialectical dilemmas. Although the repetitive patterns described by dialectical dilemmas are common in patients diagnosed with BPD, it is not necessary that each patient describes each dialectical dilemma. It is possible that the participants in the current research represented more of the inhibited grieving end of the inhibited grieving versus unrelenting crises dialectical dilemma. The participants may have used dissociation and other defenses to avoid facing the grief and loss associated with their traumatic past, which may have resulted in the negative association between trauma and dissociation.

The present study has found some support has been found for Linehan's biosocial theory of BPD, particularly the invalidating environment and emotional dysregulation. It is possible that participants were also over-represented in the inhibited grieving end of the inhibited grieving versus unrelenting crises dialectical dilemma. However, the theory does not give adequate weight to childhood trauma history in the development of BPD. Rather, the theory gives weight to factors of 'genetic make-up' and 'temperament', which are in operation in every person and which anyway have not been empirically tested. The theory does not adequately explain the development of BPD as opposed to non-BPD conditions.

### Beck's Cognitive Theory

The present research did not assess the thinking of the participants. Therefore, it cannot be stated whether the participants' had the three basic assumptions of "the world is dangerous and malevolent", "I am powerless and vulnerable"; and "I am inherently unacceptable" (Beck et al., 1993, p. 186). The assumption from Beck's

writing is that these basic assumptions are at the heart of BPD pathology, and thus need to be changed to effect improvement. However, considering the extensive childhood trauma histories of the participants, it may be conjectured that these assumptions reflect the childhood reality of the participants and represent a rational view of the world. However, the three basic assumptions have not been investigated in the current study, and not in any literature to date, and can therefore not be commented on conclusively.

Beck also put forward a theory of dichotomous thinking, or thinking in terms of extremes, in people diagnosed with BPD (Beck et al., 1993). Dichotomous thinking was reflected in the pattern of responses to the MMPI-2 in the current research. The MMPI-2 requires a true or false answer, which forces the person to choose between extremes. However, the high number of elevations across the clinical scales of the MMPI-2 found in the sample indicates that the participants endorsed seemingly contradictory statements simultaneously. This pattern of response indicates dichotomous thinking, but may extend the concept to reflect the identity disturbance common in people diagnosed with BPD. Participants endorsed both ends of a continuum, indicating that they were both sad and happy, for example, but not in-between. It may be conjectured that this type of response indicates a lack of firm knowledge about what they are feeling, and may be thought of as indicating a lack of a clear sense of identity.

Although some support has been found for Beck's (Beck et al., 1993) cognitive theory of BPD, particularly in dichotomous thinking reflected in MMPI-2 profiles, the theory does not adequately explain the development of the dichotomous thinking or of the three basic assumptions. The theory also does not incorporate

research findings of history of childhood trauma, or the extent of psychological distress in adulthood.

### Kernberg's Object Relations Theory

The object relations theory of psychodynamic psychology is one of the most comprehensive in its consideration of intra-psychic development. Although Kernberg's theory has been criticised for being too reductionist in its focus on one developmental phase (Gabbard, 1995) and does not incorporate the effects of a childhood trauma history, it provides a comprehensive description of the development of the self.

Kernberg's theory focuses on a disruption in the separation-individuation phase of development in infancy (1975). In theory, successful separation and individuation depends on the capacity of the mother to provide an emotionally and physically safe environment in which her child may separate from her and develop a sense of identity of his or her own. The finding that 90% of participants reported emotional neglect in infancy supports the theory of disruption in the separation-individuation phase of development. An emotionally neglectful environment does not represent the emotional protection necessary for successful separation from the mother. However, Kernberg theorised that disruption to separation-individuation may be caused by parenting problems in the mother, such as the mother's need for the child as central to her own self image, by an oversupply of aggression in the child, or by an interaction of the two. The present research findings do not support the notion of an over-involved mother, rather they support the notion of emotional under-involvement of *both* parents. An oversupply of aggression in the infant was also not supported in current research, but neither was it refuted. The concept of oversupply

of aggression in the infant would be very difficult to operationalise in retrospective research, and may never be empirically tested.

According to object relations theory, someone who develops a BPD has internalised predominantly negative objects (Kernberg, 1975). If an environment is not rewarding and actually abusive, a predominance of negative objects are available for introjection. If the infant takes in the 'bad' aspects of the environment as part of his or her self, the result is to feel generally like a bad person—at fault for everything—while simultaneously protecting a good image of parts of the environment, such as the parents. Some anecdotal support was found for this premise from the case studies, where Georgina said that she felt "even Santa hated me". Although this quotation provides some evidence of experiencing the self as 'bad', there was not evidence for the concept that taking in bad objects allows the environment to remain good. Indeed, eight out of ten participants attempted to run away from home at some point before the age of 16 years, which suggests an overwhelming conclusion on their part that their environment was indeed 'bad'.

Kernberg has discussed that by taking in the bad or ungiving aspects of an emotionally unavailable or disturbed mother, the infant protects his or her good image of her (1975). This figuratively keeps the "good" mother available by keeping the hope and belief in her goodness alive—she is only ungiving or unavailable because the infant is so bad as to be unworthy of love and attention. However, clinical observations attest to BPD patients' often strong feelings of anger towards their mothers, including children who were abused by their fathers without their mother's intervention.

Theoretically, the introjection of 'bad' objects in infancy results in the developmental process becoming somewhat fragmented and the "good-bad" split continues as a pattern of defending the ego against annihilation or abandonment. In Kernberg's theory, the belief that the individual is bad and at fault for all of the horrible things that are happening to it provides a modicum of control in that if the individual were somehow better, the horrible things would cease (Kernberg, 1975). In the present sample, the fact that the horrible things did *not* cease regardless of what the individual attempted, would be expected to have reinforced the split between good and bad (Beck et al., 1993).

The pattern of splitting into extremes was supported in the current research by the pattern of responses to the MMPI-2. The number of elevations on the clinical scales of the MMPI-2 indicates that participants were able to simultaneously endorse contradictory items, reflecting a dichotomous split, but also reflecting that the participant can endorse the opposite end of the continuum very quickly. This type of pattern would be expected to be reflected in mood swings. The Rorschach data also support the nature of a dichotomous split. The findings of ambitent and extratensive protocols indicate that feeling has a diffuse impact on thinking, and results in a person making quite different decisions in similar circumstances. Therefore, empirical data support the notion of a dichotomy of thinking and feeling in patients diagnosed with BPD, and therefore support Beck's concept of dichotomous thinking (Beck et al., 1993), but not necessarily a good or bad dichotomy, as postulated by Kernberg's (1975) theory. The empirical data also indicate that the dichotomy is by no means consistent—something that is good one minute can be bad the next minute, or an

action that is has been extensively reasoned in one instance can be impulsively performed the next.

The 'continuing fight', or compulsion to repeat, is understood as a repetition of the original trauma situation (Freud, 1917). The continuing fight is an example of how repetition, or acting out, is a way of remembering and communicating the original trauma (Freud, 1914/1963). In regard to traumatic neuroses, Freud states "it is as though these patients had not finished with the traumatic situation, as though they were still faced by it as in immediate task which has not been dealt with" (Freud, 1966/1917, p. 340). The notion of repetition of the trauma was reflected in the incidence of self-injurious behaviour in the sample. All participants had engaged in some type of self-injurious behaviour such as cutting or burning.

Although some support has been found for the object relations theory of BPD, the specific theory of BPD is not comprehensive enough to explain the complexity of the phenomenology of the disorder. The extensive trauma history across all phases of childhood in particular, beyond the separation-individuation phase of development, is not sufficiently incorporated into theory. Kernberg (1975) has theorised that because the child founders at the separation-individuation stage, where he or she would usually separate from the mother and gain a separate and more reality-based view of her, further development is stymied. Insufficient attention has been paid to those words *further development is stymied*. In this premise lies the foundation for development of a personality disorder: the disruption has occurred at an early point in development, and the resources are not available to get back on the track of normal personality development. Future gains are corrupted by insufficient development at



past stages resulting in too few resources to cope with challenges, which may even take the form of further traumatic events.

### Summary

Otto Kernberg's (1975) theory has thus far been the most comprehensive in terms of explaining BPD in terms of abnormal personality development. However, Kernberg's theory has not integrated the empirical findings of extensive childhood trauma histories (e.g. Herman et al., 1989; Shearer, 1994; Oldham et al., 1996) beyond the separation-individuation phase of development. Herman has put forward a diagnostic category for adult symptomatology that takes into account personality changes due to childhood trauma (Herman, 1992), but does not explain the impact of trauma on childhood development. Although, it was not Herman's intention to explain the impact of trauma on personality development in developing her theory of trauma, such an explanation is a prerequisite for understanding personality disorder. Linehan refers to the 'invalidating environment' of patients diagnosed with BPD (Linehan & Kehrer, 1995), but not sufficiently to the role of a more acute childhood trauma history. Beck describes basic assumptions in the cognition's of people diagnosed with BPD that sound almost identical to what the reality might be like for a child in a traumatic environment, but also does not refer to trauma histories in any depth (Beck et al., 1993). The specific theories of BPD are therefore lacking in essential detail to explain the development of BPD, including childhood trauma history and extent of adult personality disruption. The theory of ~~general~~ personality development throughout the lifespan of Erikson (1969) may offer a broader framework for understanding some of the empirical data in the current research, but not the specific development of BPD.

### Erikson's Theory of Lifespan Development

Erikson's (1969) theory of psychosocial development can provide a framework for understanding present research findings. Given the level of emotional neglect (90%) in infancy of the participants, Erikson's theory would state that basic trust would not have developed. The earliest experience of sexual abuse in the sample was at the age of three years, in Erikson's autonomy versus shame and doubt period. Theory suggests that shame and doubt would have developed in this person. All participants reported some type of trauma in infancy, which would theoretically remove the possibility of a supportive atmosphere for the child. Therefore shame and doubt would have predominated in all participants, not just the one who was sexually abused in this period. Between the ages of four and five the child theoretically develops a sense of initiative or guilt, based on identification with his or her parents. The parents of participants in the present study were at least neglectful (90%) in this period, and at most sexually and physically abusive (60% and 20% respectively). The participants would have been expected to develop a sense of guilt based on their experience with their parents at this age.

Erikson's theory of the ages between six and puberty, or latency, is where the peak trauma experiences occurred in participants. The participants' reported experiences of trauma, and theoretical lack of a sense of basic trust, sense of shame, doubt, guilt and inferiority, would have been expected to make the entrance into school a difficult experience. The child would have found it very difficult to take part in the active work of learning. Therefore, according to Erikson's (1969) theory, a sense of inferiority theoretically develops through the inability to 'win' through

industry. The lack of a sense of industry over authority would also result in a lack of a sense of mastery over the self and environment.

Adolescence, according to Erikson's (1969) theory, is where the tasks of childhood are integrated with sexual and physical development to form a coherent sense of self. The impact of the traumatic experiences on prior stages of development and the impact of the continuing trauma in adolescence would make forming a coherent sense of self almost impossible for participants in the present research. The task would be expected to be worse for the 70% who reported a chaotic family environment in childhood. Therefore, during adolescence Erikson's (1969) theory suggests that the participants would develop identity diffusion and fragmentation.

In young adulthood interpersonal intimate relationships develop a sense of intimacy and solidarity versus isolation (Erikson, 1969). The participant with a childhood trauma history and fragmented identity—already quite different to his or her peers—would theoretically find this extremely difficult, and therefore develop a sense of isolation from intimate relationships.

Therefore, Erikson's (1969) stage theory of psychosocial development provides a framework for understanding the childhood trauma histories described by participants in the current research diagnosed with BPD. The impact of childhood trauma on participants in an Eriksonian framework accurately reflects some of the diagnostic criteria for BPD, for example, instability of relationships and identity disturbance. It may also be theorised that a lack of basic trust may manifest in frantic efforts to avoid real or imagined abandonment, as there would be no trust that separations would not become permanent. In an Eriksonian framework a personality

disorder arises from the impact of childhood trauma history in preventing the development of the resources necessary for normal and mature development

Therefore Erikson's (1969) theory provides a more comprehensive framework for understanding the impact of empirical findings of childhood trauma history on personality development than the specific theories of BPD, such as those of Beck (Beck et al., 1993) and Linehan (Linehan & Kehrer, 1995).

#### 5.4 Clinical Implications

Empirical investigation has shown that participants diagnosed with BPD report extensive childhood trauma histories, post traumatic stress symptomatology, and consistent adult personality profile. These findings have considerable clinical implications regarding diagnosis and treatment of BPD.

Clinical implications of the findings include:

- ◁ The MMPI-2 can be used clinically for differential diagnosis of BPD.
- Hallmarks of BPD on the MMPI-2 include a high number of elevations across the Clinical scales and an inverted V on the validity scales.
- Elevations on scales 2 (Depression), 4 (Psychopathic Deviate), 7 (Psychasthenia) and 8 (Schizophrenia) elevated is a reliable indicator of BPD. This pattern of elevations is interpreted clinically as reflecting the thought disorder, depression, impulsivity and general anxiety that patients diagnosed with BPD experience.
- The VRIN and TRIN scale scores in the normal range indicate high or invalid F scale scores may be interpreted clinically.

The identity disturbance of BPD may have manifested on the MMPI-2 as difficulty saying definitely whether a statement about the self is true or not true. This

identity disturbance results in many seemingly contradictory items being endorsed, and appears as elevations in a number of the clinical scales. With the disruption to the sense of self kept in mind as a central aspect of BPD, the results are understandable, and are reflected in most of the specific theories of BPD, e.g., dichotomous thinking (Beck et al., 1993) and splitting (Kernberg, 1975). If there is not a clear sense of self then it is quite feasible to experience depression and thought disruption, paranoia, and anxiety, and so on. The fragmentation of identity means that seemingly contradictory symptom states can occur concurrently. If DID is taken as an extreme of personality fragmentation, then numerous elevations on the MMPI-2 may be understood as reflecting different personalities or dissociative states. The high levels of dissociation in the sample indicate that this type of phenomena is occurring in BPD, and as such is reflected in a number of elevations on the clinical scales of the MMPI-2. In this way, the number of elevations on the clinical scales of the MMPI-2 in the participants with childhood trauma histories may reflect the impact of the trauma on personality development. The number of elevations may also reflect "thought disorder, impulsivity, depression, anxiety, anger and suspiciousness" (Gartner et al., 1989, p. 430) that has become entrenched as distinct parts of the personality, with little integration and continuity.

A significant positive finding in the research was that scales 9 (Mania) and 5 (Masculinity-Femininity) were not elevated. Scores for scale 9 ranged from 42 to 76 (participant number two had the only elevation of T=76), while scores for scale 5 ranged from 33 to 82 (participant number seven scored the elevation of T=82). The results from scale 9 indicate that most participants were reasonably social and friendly, and tended to be hard working and achievement oriented (Hathaway &

McKinley, 1991). They were also outgoing and had a wide range of interests, and the capacity to be responsible, realistic and enthusiastic. According to Graham, hospitalised patients with lower scores on scale 9 have a more favourable prognosis than those with higher scores (Graham & Butcher, 1990). One participant (number two) was hospitalised at the time of participation, the other nine were not. However, all had had a psychiatric hospitalisation, and all were current patients in the mental health system, and required case management. Therefore, they were somewhat similar to the hospitalised sample of Graham's research. Therefore it is likely that Graham's results are applicable to the current sample (Graham & Butcher, 1990).

The participants scored in the moderate or modal range for females (T=41-59) on scale 5 (Masculinity-Femininity). These scores indicate that the participants generally have the capacity for empathy, and that they have tended to be capable competent, active and spontaneous at times (Hathaway & McKinley, 1991).

Normal range scores for scales 5 and 9 therefore indicate some strengths in the participants, including the capacities for empathy, responsibility and achievement orientation (Hathaway & McKinley, 1991). These qualities are important to keep in mind when considering patients diagnosed with BPD, and highlight positive aspects of a generally poor presentation. Graham's suggestion that a lower score on scale 9 is associated with a positive prognosis in hospitalised patients is particularly important for clinical work with people diagnosed with BPD.

The current specific theories of BPD have not so far provided a framework in which to fully understand clinical and empirical observations of extensive childhood trauma history and extreme psychological distress with little integration. A comprehensive theory of BPD needs to incorporate the impact of childhood trauma

on personality development, and also reflect how that manifests in adult psychopathology. The diagnosis of Complex Post Traumatic Stress Disorder (Herman, 1992) is useful in the latter but not the former. A combination of Erikson's (1969) theory of psychosocial development and the object relations perspective of the development of the self are useful in attempts to understand the impact of childhood trauma on personality development. However, these theories do not accurately reflect the complexity of adult psychological distress, and need to be integrated and then empirically tested to provide a firm basis for a clinical understanding of BPD.

The current findings cannot provide directions for specific treatment of BPD. However, anecdotal evidence of a lower level of dissociation in a patient who was receiving psychotherapy provides some support for using psychotherapy to treat BPD. The current findings do provide a context for which to understand BPD and therefore can provide a support to staff in their treatment of patients diagnosed with BPD. For example, acting out behaviour, including self-harm, can be understood in terms of the repetition compulsion discussed earlier. Likewise, splitting of staff into 'good' and 'bad' can be understood as projective identification, and help staff to understand their feelings as a reflection of how the patient feels, rather than as a direct personal attack. Finally, the severity of childhood trauma history and its effect on personality development in keeping patients diagnosed with BPD in a less mature developmental phase may promote understanding of the difficulties faced in trying to operate in the everyday world with impoverished resources.

### 5.5 Methodological Issues Which May Have Contributed to Findings

There are a number of methodological issues that may have affected the results obtained. These are primarily concerning the measures used, but also extend to some general difficulties encountered with this type of research.

The small sample size and fact that the sample were all women means that the present findings are difficult to generalise to the general population of BPD patients, or even female BPD patients. The methods of recruitment may have also contributed to the results. Participants were identified by clinicians working in Community Mental Health Clinics. It is also important to consider that 17% of the participants (two of 12) were not included in the research, which suggests a high rate of misdiagnosis. Clinicians' general reluctance to refer patients to the research may have resulted in a skewed sample, reflecting only those participants' whose clinicians were supportive of the research or the participants who were most clearly identifiable as having BPD. It is also possible that clinicians were aware of participants' childhood trauma histories and referred them to the study on that basis, despite being strongly encouraged not to take childhood trauma history into account when making a referral. These factors may have combined to produce a more disturbed sample.

As a self-report measure of dissociation, the DES has been well researched and has adequate reliability and validity (Carlson & Putnam, 1993). Reliability was also found to be adequate for the present sample (Cronbach's  $\alpha = .88$ ). Dissociation is defined in DSM-IV as "a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment" (APA, 1994, p. 477). In being asked to complete the DES, participants are asked to comment on how often a disruption of consciousness, including memory, occurs. The DES is therefore



a subjective measure of how often people feel they are cut off from reality, and requires people to report on something that they do not necessarily know they do. It is thus important to consider the DES as an indication of the participant's awareness of what is happening to them regarding dissociation, rather than of actual behaviour. The authors (Carlson & Putnam, 1993) also state this caution in using the DES.

The TAI is a subjective measure of people's experience of childhood trauma. In this research information was not collected from other sources that would corroborate the participant's testimony of childhood experience. Therefore, results are interpreted in terms of the participants' subjective experiences, and their subjective reports of adult symptomatology. The TAI is also a retrospective instrument and as such is reliant on participants' memory of their childhood. With the high levels of dissociation found in the sample, the reliability of participants' memory may also be questioned. This type of approach, while it cannot testify to actual levels of childhood trauma, provides an experiential approach to BPD. The participants believed in the objective truth of experiences related in the TAI, and their adult symptomatology can be seen as a reflection of their perception of history.

Although the TAI has been shown to be very effective in eliciting subjective childhood experiences of trauma, some methodological problems arose regarding the scoring criteria. Some of these problems have already been discussed (see Chapter 3, section 3.2.1.1). Traumatic experiences are scored once only for each type of experience, and once only for each perpetrator. Therefore, a one off experience of sexual abuse at age 10 is scored the same as systematic sexual abuse every night by same person between the ages of seven and 11. The difficulty with this type of scoring occurs in attempting to compare trauma histories between participants, as

required when investigating a positive or negative relationship between severity of trauma history and severity of dissociation, adult PTSD symptomatology and personality profile.

The overall reliability of the TAI was called into question when individual analysis of case material indicated emotional neglect in a protocol that was not scored positive for emotional neglect. Until the reliability of the TAI can be conclusively established, the validity of the present results cannot be confirmed.

The scoring criteria of the TAI also do not provide sufficient grounds for hierarchical organisation of trauma history, in that long term abuse can be scored equal to one off experience. Therefore, the TAI may be better used as a categorical instrument, rather than ordinal as the authors suggest (Herman et al., 1989). The current research followed the methodological path set by Herman and her colleagues to enable comparison of data. Future research using the TAI should therefore employ a different methodology. The issue of measuring severity of childhood trauma history that has arisen in conjunction with the TAI is an issue that applies to all research in this area. It is very difficult to state whether losing one's mother at two is worse than experiencing sexual abuse for a number of years in childhood.

## 5.6 Conclusion

Although retrospective studies cannot confirm aetiological pathways, the present findings of childhood trauma histories in adults diagnosed with BPD can be understood in terms of impact on personality development. Theoretical contributions from a trauma framework can help researchers and clinicians to conceptualise and understand the phenomenology of BPD. Using a trauma framework can help to integrate the high levels of dissociation and post traumatic stress symptomatology

found in participants diagnosed with BPD into an understanding of the phenomenology of BPD.

Specific theories of BPD have not integrated empirical findings regarding childhood trauma history and its impact on personality development. It is necessary to broaden theoretical understanding of BPD to general theories of personality development to fully research aetiological pathways to BPD and generate understanding of BPD as a disorder of personality.

To date there has also not been sufficient theoretical or research understanding of the complexity of childhood trauma history, adult trauma, dissociation, post traumatic stress and general of disturbance as shown by self harm and the number of elevations on the Clinical Scales of the MMPI-2 reported by participants diagnosed with BPD.

## CHAPTER 6

### STUDY TWO: POSSIBLE EFFECTS OF PARTICIPATING IN STUDY ONE

#### 6.1 Introduction

At the end of study one it was evident that the participants reported a significant level of childhood trauma. The participants had voluntarily given very detailed information about themselves, and some interviews had taken over three hours to complete. The investment of time by the participants overall was not insignificant: up to three appointments of between one and four hour's duration. Anecdotal evidence regarding referral to the project showed that clinicians were concerned by possible negative outcomes for patients, and were therefore reluctant to refer patients to the study. The difficulties in recruitment, combined with an appreciation of the investment of time by the participants, led to a consideration of the effect of participating in study one. Reflecting on the experience of gathering data for study one led to the question of how did the participants experience their part in the research. This is a particularly salient question for the specific nature of study one, in that participants were asked to speak about very traumatic and upsetting experiences. The participants themselves were also quite disturbed generally, and all had had multiple suicide attempts and incidences of self-harm.

Study two was therefore formulated to investigate the question; what effect did participating in study one have on the sample?

## 6.2 Literature Review

### 6.2.1 Effects of Research Participation

There is very little research evaluating the effects on participants of taking part in clinical research. The special nature of clinical samples, which can be more disturbed, and clinical research, which can be more demanding, means that participants' experience in clinical research would be expected to be different from that of other populations.

Although there has been little research in clinical populations on evaluating research experience, studies have been conducted in other areas of psychology. Recent research in family therapy investigated the assumption that participating in family research left the families relatively unchanged. Bussell and her colleagues (Bussell, Matsey, Reiss, & Hetherington, 1995) analysed a feedback questionnaire answered by 235 of an original sample of 720 families who took part in a longitudinal study on family process and adolescent development (Reiss, et al., 1994, cited in Bussell, et al., 1995). Most respondents reported their participation as being positive or benign (70%) and 88% reported they found the study interesting (Bussell et al., 1995). Over 90% said they would participate in further research (Bussell et al., 1995). Positive effects of participating in research have also been found from bereavement studies (Cook & Bosley, 1995). The authors followed up 21 participants who took part in a study of funeral rites, and assessed participants' thoughts and feelings regarding their participation via questionnaire. Participants reported their experience as positive, and particularly noted the opportunity to express their feelings about their loss as being helpful. An altruistic aspect was shown in the respondents' belief that

their participation would help both themselves and others in specific ways (Cook & Bosley, 1995).

Therapeutic benefits of participating were also reported in the Bussell study (Bussell et al., 1995). For example 15% said their family felt closer to one another due to participating, 21% said participation caused them to discuss issues which they had already identified as problem areas, and 13% said it caused them to discuss things that they had not talked about before. Only 2% of families reported adverse consequences of participating in the research, for example increased arguments or a change for the worse. The authors concluded that asking questions is itself an intervention, given that the process of answering questions caused the family to "confront a whole set of implied meanings and beliefs" (Bussell et al., 1995).

The authors also likened their interview stance of 'not knowing' and 'quiet, non-interpretive listening' to some psychotherapies, particularly from a family therapy framework (Bussell et al., 1995). They suggested that a non-judgmental attempt at understanding a family was therapeutic in itself, and created space for new meaning and understanding. The fact that the research was conducted over time may also have contributed to the positive benefits of participating, such as the possibility that a supportive relationship developed between researcher and family.

However, the authors were concerned at the finding that a small number (2%) of families found participation in the research quite harmful (Bussell et al., 1995). In response to this, the authors emphasise the need for referral information to be provided to participants routinely with the consent form (Bussell et al., 1995).

Approximately 65% of families in the original research did not provide feedback (Bussell et al., 1995). However, a firm conclusion was made that

participants are not left unchanged by participating in research (Bussell et al., 1995), although the question of exactly how they were changed remains.

### 6.2.2 Comparison of research participation with clinical psychological assessment

In Study One participants' completed the MMPI-2, DES and TAI, and seven participants also completed the Rorschach Test (five protocols were scored). The MMPI-2 and Rorschach are particularly common tests used in clinical psychological assessment (Groth-Marnat, 1990). The DES is not dissimilar to paper and pencil measures such as the Beck Depression Inventory (Beck, 1978), in that both are relatively short measures of specific symptom domains which are also used routinely as assessment tools. The TAI is a semi-structured interview that covers the participant's history from childhood (Herman et al., 1989), with a focus on traumatic experiences, but also covering aspects of the person's present and past experience such as friendships, support networks and medication use. The TAI is therefore similar to a clinical interview. Therefore, the tasks of Study One were similar to a clinical psychological assessment made up of interview, personality testing and specific symptom assessment.

Research on the effects of participating in psychological assessment is also limited, particularly regarding possible negative effects. In the absence of research data it is necessary to look to theory to shed light on the experience of participating in clinical assessment insofar as it is similar to the processes of Study One.

A clinical interview is often the first contact between the clinician and the patient in the assessment process. The clinical interview routinely involves assessment of current symptoms and a detailed history of the patient, and seems therefore focused on the clinicians' needs. However, a definition of the clinical interview from

Harry Stack-Sullivan (1970) reminds the clinician that the patient expects to get some benefit from the process. Therefore, although a participant may not expect to get direct benefit from a research interview, there may be an unconscious expectation that they will. Thus, participants may experience some disappointment when the research process concludes without an obvious change in their circumstances.

Some less overt objectives of the clinical interview are to "establish a relationship that is conducive to obtaining the information" and "develop greater understanding in both the interviewer and interviewee regarding the problem behaviour" (Groth-Marnat, 1990, p. 57). Because the TAI is only semi-structured, participants may experience it as a more unstructured situation than a pen and paper test, and thus the relationship between interviewer and interviewee may be perceived as being as important as the questions. It is believed that the process of the clinical interview can provide motivation for the patient to go on to further work (Golden, 1978).

At the completion of the assessment, it is routine for clinical psychologists to feed back the results of the assessment to either the patient, the referrer or, usually, both. This process in itself has been shown to be therapeutic. For example, an experiment was conducted using the MMPI-2 and college students ( $n=60$ ) who were waiting for treatment at a university counselling agency (Finn & Tonsager, 1992). Participants who had feedback of their test results reported a significant decline in symptomatic distress and a significant increase in self-esteem. They also felt more hopeful about their problems, when compared to those who received attention only from the examiner. These effects were found both immediately following the feedback and at a two-week follow up. The improvement was also unrelated to the initial level



of distress as measured on the MMPI-2, the type of pathology revealed on the test, their prior attitudes towards mental health services and the length of time between testing and follow up. The authors explained that the MMPI-2 results were likely to verify the participants' self conception, and expose them to new ways of thinking about themselves that were not so different as to be unable to be integrated by the participant. According to the researchers, feedback of results may assist the process of naming, communicating one's experiences, facilitate personality integration, and identify formation. The authors suggest that psychological assessment can be used in this way as an intervention in itself (Finn & Tonsager, 1992).

Feedback of assessment findings is often perceived as therapeutic for patients in helping them to find a framework and a context through which to understand their experience (Finn & Tonsager, 1992). This process promotes patients' belief that they are not alone, and that there is a place where their unique difficulties can be understood. In this way the assessment process may act as a "holding environment" (Modell, 1993), and may decrease the participant's sense of isolation and increase his or her hope that a place exists that will help him or her with his or her difficulties. It may be conjectured, however, that the practice of limited-session research processes may promote a sense of isolation, as the participant has come together with the researcher in a cooperative and sharing manner, after which the researcher ceases contact with the participant.

Finn and Tonsager (1992) suggested that direct therapeutic effects of feedback of psychological assessment include positive renaming of behaviours previously labeled negative. For example, the "sullen, lazy, moping child" is renamed "withdrawn" and "depressed". Therapeutic renaming of problem behaviour in adults

diagnosed with BPD may assist case managers and clinicians in their general empathy with the patient. With this renaming comes an increased understanding of current difficulties in the context of the present and the past, and in the context of the person.

Positive feedback of results has been found decrease anxiety (Bloom & Truatt, 1972). The researchers gave two groups of participants a battery of psychological tests. After the test battery was completed, one group was given the therapeutic suggestion—supposedly based on results of the test battery—that they could remain calm and relaxed during the experimental period, which involved creating a stressful situation. The control group was given no suggestions as to their coping ability. Those who were given the therapeutic suggestion were able to remain significantly more relaxed in the experimental phase than those who didn't receive the suggestion. An interesting phenomenon from this research occurred with those participants who found that the feedback was highly discordant with their own view of themselves. Although these people were found to perceive the clinician as less skilful, they still exhibited the therapeutic effects of remaining calm during the stressful experimental phase (Bloom & Truatt, 1972).

Although feedback of *positive* results has been found to be helpful for some research participants, as found in the Bloom and Truatt study (1972), it is expected that feedback of *negative* results would be experienced differently by participants. However, there is no evidence for this premise. Feedback of assessment findings from Study One, is likely to have been experienced as negative for some participants as the assessment revealed high levels of disturbance that the participant may not previously have been aware of.

Thus, there is sufficient research to suggest that participation in a psychological assessment may have beneficial effects on the participant (Bloom & Truatt, 1978; Finn & Butcher, 1991; Finn & Tonsager, 1992). However, although psychological assessment is similar to the process that occurred in Study One, it cannot be concluded that research participation is generally experienced as positive, particularly due to the lack of research investigating possible negative consequences.

The question of the effects, if any, on a research participant is important to consider in the case of the present research where the participants were all diagnosed with BPD—one of the most emotionally unstable of all clinical populations. Because of the pre-existing emotional instability, the aspect of the data collection expected to effect participants the most is the TAI.

### 6.2.3 Possible effects of the TAI

There are a number of considerations involved in assessing possible effects of a participant talking about her traumatic childhood history, as occurred in the TAI. For example, direct questioning of history may challenge the ordinary means used by the person to defend themselves against overwhelming distress, and result in the failure of these defense mechanisms. This may then exacerbate their emotional instability, such as through increased depression, or a psychotic episode. Going through a traumatic history all at once may also re-traumatise the participant. The inner resources or ego structure of the participant may not be strong enough to withstand the process of remembering their experiences.

The possibility of negative effects of relating a traumatic history is expected to be a major consideration in research into people's past traumas. This has not been reflected in a volume of research literature. Rather, theory and research literature has

focused on optimising therapeutic conditions for traumatised individuals and on the positive effects of research participation.

Trauma researchers have proposed that traumatised people require a safe place and a trusting relationship in order to tell their story (Herman, 1992). Aspects of that trusting relationship may constitute a 'holding environment' in Winnicottian terms, or recreate the safety of the early mother-infant relationship (Modell, 1993). One aspect of the holding environment is the capacity for the relationship to withstand expressions of strong emotion without adverse consequences (Modell, 1993). The relationship between researcher and participant may act as a holding environment for distressing feelings, and the participant may find a therapeutic effect in the fact that the researcher can bear the pain or horror of the participant's history. This may allow her to hope that she may also be able to tolerate it (Salzberger-Wittenberg, 1970).

The nature of the TAI as a chronological account may be therapeutic in itself. Indeed, it has been stated that "the psychiatrist who takes a careful history may therefore find that he has effectively begun a therapy, or even have completed it" (Malan, 1995). The chronological nature of the TAI may also be helpful for participants in gaining some sense of order in their often chaotic memory of events, and therefore reconnecting fragments of memory.

The process of remembering traumatic events during the TAI, although painful, may be helpful for participants. Herman has stated that "remembering and telling the truth about terrible events are prerequisites both for the restoration of the social order and for the healing of individual victims" (Herman, 1992). This quote also introduces the issue of simply being listened to without consequences or the

influence of the researcher's own emotional reactions or agenda, which may be particularly salient as the participant may have had many experiences to the contrary. However, it is possible that the neutral stance of the researcher may be experienced in the same framework as past experiences of having trauma experiences insufficiently heard by others enough to warrant intervention.

It is possible that taking part in the TAI may form part of a debriefing mechanism. Mitchell (1983) has proposed a five-stage model of trauma debriefing. The model encourages participants to a) tell the story of what happened, b) share their responses to the event, c) understand survival responses, d) contract for recovery and e) obtain some closure on the event (Mitchell, 1983). This process has been operationalised into seven stages of Critical Incident Stress Debriefing (CISD) for general use by the Victorian Department of Human Services (Victorian In-Service Nurse Education (VINE), 1994). The seven stages are: introduction, fact phase, thought phase, feeling phase, symptom phase, teaching phase and re-entry phase (VINE, 1994). Aspects of these seven phases are similar to taking part in the research process, particularly using the TAI.

In the absence of research data, it is only possible to raise questions regarding the TAI as a debriefing mechanism. The TAI and research process followed the VINE (1994) introduction and fact phase, with some informal inclusion of thoughts, feelings, and symptoms. It is possible that the experience of these phases of Critical Incident Stress Debriefing may have been experienced in the present research as positive. However, it is equally possible that the lack of teaching and re-entry phases and formal attention to thoughts, feelings and symptoms may have had a negative effect on participants

There is some research on the use of debriefing as intervention for PTSD (FitzGerald et al., 1993). One hundred and twenty soldiers diagnosed with PTSD after returning from service in Saudi Arabia took part in a detailed research questionnaire and were then encouraged to recall the facts of their traumatic experiences. This process was found to decrease emotional reactivity and aid in integration (FitzGerald et al., 1993). These results support a conclusion of positive effects due to debriefing mechanism of recalling traumatic experiences, as occurred in the current research through the TAI for participants' with PTSD.

Therefore the question for Study 2 was; how did participants rate the effect of being interviewed by the researcher using the TAI?

#### 6.2.4 Aim of Study Two and Hypotheses

The overall aim of Study Two was to investigate the effect on participants of taking part in the research process involved in Study One.

The hypotheses for Study 2 were:

1. The relationship between the researcher and the participant was experienced as positive, as shown by a score significantly above 3 on the Relationship Scale of the Trauma Research Experience Evaluation Questionnaire (TREEQ).
2. Participation in the research had a positive effect on trauma related symptoms, as shown by a score significantly above 3 on the Symptom Scale of the TREEQ.
3. Participants were involved in the research primarily to help others, as indicated by a score significantly above 3 on item 12 of the TREEQ.

## 6.3 Method

### 6.3.1 Participants

Participants were 12 women-11 of Anglo Saxon origin, and one of Greek-German extraction-between the ages of 22 and 40 years, ( $M = 32.8$ ,  $SD = 6.8$ ). All women were diagnosed with BPD by their treating clinician from the Western Healthcare Network or Victoria University Psychology Clinic. This diagnosis was confirmed using criteria for BPD according to DSM-IV in the initial stages of recruitment. A DSM-IV BPD checklist was developed according to DSM-IV criteria (see Appendix I) and was completed by case managers (in the case of clients of the Western Healthcare Network) or the treating psychotherapist-a trainee clinical psychologist-(in the case of the Victoria University Psychology Clinic).

Six out of ten women were single, two were separated, one was divorced and one was married. The women had completed an average of 12.1 years of education, with most having left school before completing high school (median = 11 years). The highest level achieved was the completion of a science degree. Half the sample had between one and three children, and the other half had no children. Three participants were working, two part time and one full time. The participant working full time became too ill to continue working within a month of testing, and subsequently lived on a sickness benefit provided by the government. Seven out of ten women were receiving government assistance at the time of participation in the research and the median income was \$10,000.

Not one woman reported being in excellent health. Seven women had a chronic medical condition, including three with asthma, two with stomach ulcers, one

with hormone disorder, and one with rheumatoid arthritis. The two remaining reported their health as fair and poor, with no specific physical health complaints.

### 6.3.2 Measures: Trauma Research Experience Evaluation Questionnaire (TREEQ)

The Trauma Research Experience Evaluation Questionnaire (TREEQ) was specifically designed for this study (see Appendix X). The TREEQ had 15 items, developed from concepts extracted from a literature review. Twelve of the items were closed-ended questions and three were open-ended. Five items were developed by referring to the trauma theory of Judith Herman (Herman, 1992). These items involved percepts of safety, trust, the creation of an environment where the person felt they could disclose without fear for the researcher's mental health, feeling the researcher believed their story, and remembering and providing some order in a chaotic history (Herman, 1992). Examples of these items include 'I felt the researcher believed what I said', and 'I thought if I told my story that harm might come to me'. An item relating to Freud's concept of catharsis—remembering with accompanying feeling leading to a reduction in symptoms—was also added (Freud, 1910/1962). This item was "I felt better for having told my story".

Items were directed towards assessing specific PTSD symptom reduction, according to DSM-IV, such as dissociation, anxiety and nightmares (APA, 1994). Two symptom-related items were associated with the overwhelming aspects of PTSD: 'I have had fewer flashbacks and/or nightmares since talking to the researcher', and 'I have felt more anxious since talking to the researcher'. The other two symptom-related items were associated with the psychic numbing aspects of PTSD: 'The times I feel unconnected to reality or off in a dream seem to have increased since talking to the researcher' and 'I have felt more depressed since talking to the researcher'. One



item was added to assess participation due to altruism, and one was included to assess identity disturbance considered common to BPD (APA, 1994). This was "Since talking to the researcher, I have known who I am a bit more". Three open ended questions invited participants to describe in their own words how they were feeling, if there had been any major events in their lives since taking part in the research, and their experience of participating in the research.

Each item was scored on five point Likert scales, ranging from 1 (strongly disagree) to 5 (strongly agree). Symptom items included an extra category of 6 (not applicable). Likert scales for the closed-ended items were chosen because they offered simplicity and reliability, and are commonly used in this type of psychological research. The range of agreement-disagreement responses available in Likert scales may be more attractive to the respondent than simple yes or no options. This type of graduated response set also offers more precise and reliable information about the respondents (Judd et al., 1991). The items were approximately balanced for positive and negative wording to address social desirability bias. There were seven positively worded items and five negatively worded items in the final questionnaire.

The face validity of the TREEQ was not apparent or sufficient, and there was not enough data for a factor analysis. To address validity concerns the researcher employed a Q-sort technique. The researcher emailed the TREEQ items to three raters, all of whom had post graduate qualifications: one in psychology, one in science and one in law. The three raters were asked to separate the items into those they thought related to the relationship with the researcher and those relating to symptoms. Items 1, 2 and 4 were unanimously deemed to be relationship items. All three raters also agreed that items 6, 7 and 9 were Symptom items. Items 3, 5, 8, 10 and 11 were

judged by two out of three to be Symptom items. Therefore the Relationship Scale consisted of items 1, 2, and 4, and the remaining eight items made up the Symptom Scale. Item 12 was not included in the two scales because it assessed altruistic motivation for participating in the research, and therefore did not provide an indication of positive or negative effects of participation.

Two items of the Symptom Scale included a category of 'not applicable'. These were items 7 and 9 and related to flashbacks and/or nightmares and dissociation. The 'not applicable' option was added in case the participant did not experience these symptoms. The remaining Symptom Scale items did not explicitly address symptoms with the exception of two items: one addressing depression (item 10) and one addressing anxiety (item 8). Although specifically addressing symptoms, depression and anxiety are sufficiently common in a normal population, unlike flashbacks, nightmares and dissociation, for people to be able to say whether they have improved or worsened recently.

Scores for each scale and item 12 were the mean item scores, with scores for negatively worded items reversed so that higher scores reflected positive effects. Responses of 'not applicable' for the symptom scale were not included in the overall scale score. Therefore, scores for each of the Relationship and Symptom scales and item 12 ranged from one (bad experience or symptoms worse) to 5 (good experience or symptoms improved).

Open-ended questions at the end of the questionnaire were reviewed qualitatively.

### 6.3.3 Procedure

The TREEQ was posted with a stamped self-addressed envelope enclosed for return. A cover note was included which explained the purpose of the questionnaire and the progress of the study (see Appendix XI). Administration by mail-out was chosen above personal administration to try and avoid contaminating results with the researcher's presence. It was thought that the respondents might find it difficult to say negative things about their experience in the research if the researcher was present. The disadvantage of this procedure was that the researcher was not on hand to answer questions about any of the items. Eight of the ten questionnaires were returned: an 80% response rate. The researcher scored all questionnaires. Results were statistically analysed using descriptive statistics and single sample *t*-tests. The baseline for comparison of any changes was the time between Study 1 and receiving the TREEQ. Participants are identified by letter to avoid confusion with participant numbers from Study One. Due to the anonymity of Study Two, participants were not identified and therefore not matched to the results of Study One.

6.4 Results

Table 14 shows the descriptive and *t* statistics for the relationship and symptom reduction scales of the questionnaire.

Table 14  
Descriptive and *t* statistics for the Relationship and Symptom scales of the TREEQ.

TREEQ scale	<u>M</u>	<u>SD</u>	<u>t</u>
Relationship	4.1	.5	6.2*
Symptom Reduction	3.3	1.0	.8

\*Significant *p* < .001 *df* = 7

The Relationship and Symptom Scales for each participant are shown in Figure 7.

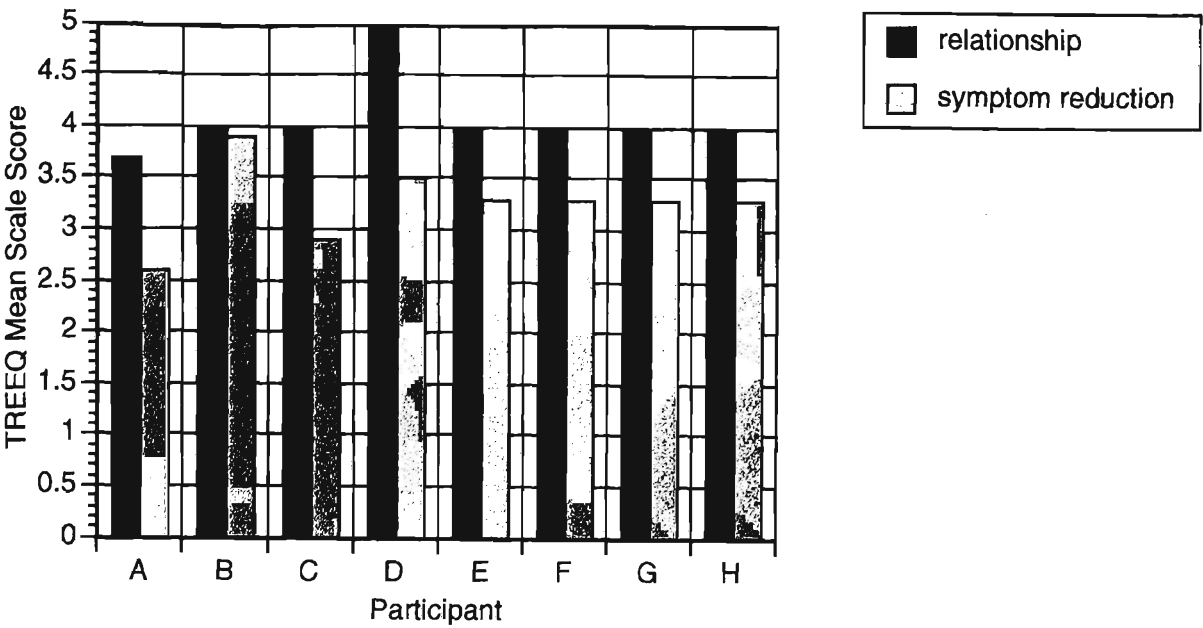


Figure 7. Mean Relationship and Symptom Scale scores for each participant.

It can be seen from Figure 7 that the difference between participants scores on the relationship and symptom scale are similar, with two exceptions. Otherwise mean scale scores are relatively flat across the sample, indicating little change since participating in the research. Two participants' had scores below 3 on the Symptom Scale, indicating a worsening in symptoms. These were participant's A and D on the graph. Participant A had her second psychiatric admission in her life since participating in the research. It was when she was in hospital that she filled out the questionnaire. While her symptoms had worsened, she emphasised that it was not a result of her participation in the research. She said of her experience of participation in that: "I felt ok about talking about it and would like to gain more self-confidence in myself". Participant D wrote that she was feeling 'very upset' and had decided to leave the city where she had lived for over ten years to move back to the city where she grew up.

#### 6.4.1 Hypothesis 1

The relationship between the researcher and the participant was experienced as positive, as shown by a score significantly above 3 on the Relationship Scale of the TREEQ.

The three questions assessing the relationship between researcher and participant were:

1. I felt I was able to trust the researcher.
2. I felt the researcher was able to cope with the things I was telling her.
4. I felt the researcher believed what I said.

After Bonferroni adjustment, there was a significant positive experience of the relationship between researcher and participant ( $t(7) = 6.2, p < .001$ ).

#### 6.4.2 Hypothesis 2

Participation in the research had a positive effect on trauma-related symptoms, as shown by a score significantly above 3 on the Symptom Scale of the TREEQ.

The eight questions assessing change in trauma related symptoms were:

3. I thought if I told my story, that harm would come to me.
5. I felt better for having told my story.
6. I felt that things were more mixed up after I spoke to the researcher.
7. The times I feel unconnected to reality or off in a dream seem to have increased since talking to the researcher.
8. I have felt more anxious since talking to the researcher.
9. I have had fewer flashbacks and/or nightmares since talking to the researcher.

10. I have felt more depressed since talking to the researcher.

11. Since talking to the researcher, I have known who I am a bit more.

A one-sample t-test found no significant difference between the sample score and the null hypothesis score ( $t(7) = .8, p > .5$ ). Thus there was no significant change in trauma related symptoms since participation in the research. See Table 14 for results.

### 6.4.3 Hypothesis 3

Participants were involved in the research primarily to help others, as indicated by, as shown by a score significantly above 3 on item 12.

Only one person disagreed with the statement 'I mainly took part in the research to help other people rather than helping myself'. Three of the remaining seven participants strongly agreed and the remaining four participants agreed with the statement. The person who disagreed said that she found her participation in the research "interesting" and said that her experience was "a bit hesitant, but found it useful to think about who I am". She felt that she did not know who she was more since participating in the research (responding 'disagree' to question 11), but reported the participant-researcher relationship as positive (scoring 2 for questions 1, 2, and 4 and scoring 4 to questions 3 and 6). One comment that confirmed this was "I felt that I was helping the researcher by telling her my story, so that she and other researchers know how people like me cope with our lives". Therefore Hypothesis 3 was supported by 87.5% of the sample.

---

#### 6.4.4 Qualitative Data

Participants provided a range of responses to the open-ended questions. Some people reported feeling very anxious and depressed when they filled in the questionnaire, while others were feeling much better. One person said "fine: the past is the past". One person said "I am not feeling too good but nobody cares. I keep forgetting things". Some major events that were experienced by the participants included the death of a sister-in-law and a suicide attempt. One person summed up the ambivalent themes by saying the research "made me look at myself, made me question myself, but this is not necessarily bad".

#### 6.4.5 Summary

Hypothesis 1 was supported: participants reported their experience of the relationship with the researcher as positive. Hypothesis 2 was not supported: there were no significant symptom changes resulting from participation in the research, which contradicts the expectations raised by trauma-debriefing model. Hypothesis 3 was also supported: participants reported that they participated in the research primarily to help others.

### 6.4 Discussion

Results from Study Two show that participation in Study One was seen overall as a positive experience, although this was not reflected in positive symptom relief.

It is interesting that participants were able to report a positive experience from the research process. The procedures of Study One were demanding, and the high degree of disturbance in the sample would be expected to have enhanced the



difficulties presented by the research task. Overall the results show that participants diagnosed with BPD were able to take something positive from their experience in the research.

The finding that participants experienced the research process as positive is supported by previous research results in family therapy (Bussell et al., 1995). Bussell and her colleagues' study found that participants found the process of answering questions about themselves and their lives over time helpful in itself. Although Study 1 occurred over only three weeks, it is possible that participants experienced the process of answering the questions of the TAI as helpful. Answering questions may have promoted thoughtfulness about the participant as a person within the context of their past and future (Bussell et al., 1995). Thus answering questions in a research setting may promote an evaluation of the individual's life which was experienced as positive in the context of the research relationship.

It is important to consider some of the aspects of the research relationship that might have been experienced as positive by the participant, as these conditions may be maximised in future research to improve benefits to research participants.

The participant may have gained direct benefits by the relationship experienced with the researcher during the data gathering phase. It is possible that the process of having the researcher tolerate hearing about the terrible histories of the participants and maintain an empathic stance may have created a holding environment and given the participant a sense that their history wasn't too terrible to talk about. It may be conjectured that the researcher's capacity to tolerate the story all at once and bear the pain of listening provided the participant with hope that they, too, can bear the pain of having experienced it (Salzberger-Wittenberg, 1970). The capacity to bear

the story and tolerate the bad feelings may be particularly important in relationships with people diagnosed with BPD given that 90% of participants reported emotional neglect in childhood, and therefore did not experience a relationship while they were growing up that included sufficient emotional care and empathy.

As with a therapeutic relationship, there is a power differential in the relationship between researcher and participant. No relationship where one person gives all of their life history or inner emotional life, or both, and the other remains largely impassive, can be equally balanced in terms of power. This power differential can contribute to an unsafe environment for the research participant in particular, as the research participant has a much more transient relationship with the researcher than a patient with a therapist, and often does not know what happens to the information given. A safe environment is established when the therapist or researcher can be trusted not to use the information provided by the participant in a disrespectful way (Finn & Tonsager, 1992). If the participant can believe that the information is approached with sensitivity and respect, and put to good use, the participant can feel positive about the relationship and has been found to be more willing to participate in further assessment or treatment (Finn & Tonsager, 1992). Results from Study Two show that the participants have been able to trust the researcher to treat their information sensitively, and that the relationship was experienced as safe.

A safe environment in which to relate a childhood history of trauma may have been established in Study One, and experienced as positive. A safe environment to speak of distressing things is one of the most important aspects of a therapeutic situation, particularly for trauma survivors (Herman, 1992). A safe environment allows the survivor to experience all of the emotions which may come with retelling

their trauma history without fear of further trauma, and helps the relationship to act as a holding environment (Modell, 1993).

The process of remembering and relating a childhood trauma history and being believed may have been a positive experience for the participants. Although there was no reported reduction in symptoms, the process of remembering and telling the truth may have contributed to the positive experience of the relationship with the researcher. Herman states that the process of remembering and relating the truth about terrible events, and being believed, is an important beginning for the healing process (Herman, 1992). Although there was no direct reduction in reported symptoms in the present study, neither was there an increase in symptoms.

Symptom relief may have been expected to occur in the sample through the benefits of debriefing provided by the TAI. Debriefing, in terms of recalling facts of a traumatic experience, has been found to be helpful in decreasing emotional reactivity and increasing integration of traumatic experiences in soldiers with PTSD (FitzGerald et al., 1993). However, the present sample did not seem to gain any benefit in terms of symptom reduction from debriefing. Almost all debriefing protocols require debriefing to occur as soon after the trauma as possible to maximise therapeutic benefits (e.g. Curtis, 1995). This research shows that recalling and relating facts of traumatic experiences in childhood did not lead to therapeutic benefits in terms of self-report of symptom reduction.

Although not found to be beneficial in terms of symptom-reduction, taking part in Study One may have constituted part of the process of Critical Incident Stress Debriefing (CISD) (VINE, 1994). The process of introduction to the research, involving introduction of the researcher and explanation of the process and purpose

of the research, is similar to Phase One of the VINE (1994) CISD model. The fact gathering during the TAI is similar to Phase Two, the facts phase, where participants relate what happened, what their role in the incident was, where they were during the incident, and if there were any special things they remembered, e.g. sights, sounds, etcetera. Although not specifically elicited, participants offered their thoughts about the incident and sometimes thoughts they had during the incident (e.g. I thought if I went along with it I wouldn't get too hurt (participant five). Therefore, aspects of Phase Three, the Thoughts Phase, were also involved. Participants also tended to offer their feelings about the incident, and also how they felt at the time, thus constituting part of Phase Four: the Feelings Phase. Again, feelings were not specifically elicited in the current research. Questions regarding symptoms were not directly asked in the research, but were asked through self-report measures (the DES and MMPI). Therefore Phase Five—the Symptoms Phase—was not addressed during the research process. Participants were also not given any information regarding trauma reactions, as would take place in Phase Six, and there was no summary process, as would occur in Phase Seven (VINE, 1994). The lack of specific attention to Phases Three through Seven, and the time delay between the traumatic event and the TAI, may account for the lack of symptom change between Study One and Study Two.

The TAI, therefore, should not be used alone as a debriefing tool for survivors of childhood trauma. However, the TAI does provide a detailed history of childhood experiences. The efforts to obtain a chronological account may have been beneficial to participants in putting things in order. Results for the question 'I felt that things were more mixed up after I spoke to the researcher' were inconclusive. Therefore,

although the participants were not clearer after the research, they were not less clear either. It is likely that clarity with regard to personal history is a gradual process. The participants would have started thinking about their childhood experiences when they agreed to take part in the research, and it may have been in the back of their mind for months afterwards. Therefore, a definite change in feeling 'mixed up' may have been difficult to discern. As part of duty of care to research participants, researchers should proceed through the seven steps of Critical Incident Stress Debriefing to encourage resolution with regard to traumatic material raised during the research process.

Research has found that patients who heard feedback of their MMPI-2 profiles reported a reduction in symptoms and an increase in self esteem (Finn & Tonsager, 1992). As half the sample in the present research received feedback of the MMPI-2, a decrease in symptoms may have been expected in at least three and at most five participants. However, although the sample in Finn and Tonsager's research was from a counselling centre waiting list, and was therefore a clinical sample, they would not be expected to have a severe psychiatric disorder such as BPD. The authors explained their results by saying that feedback of MMPI-2 results validates the participants' view of his or herself, and helps to integrate personality and identity (Finn & Tonsager, 1992). BPD is characterised by the lack of personality integration and identity disturbance (APA, 1994). It stands to reason that because of the complexity and phenomenology of BPD—and the wide range of symptoms that are often experienced—participants may not benefit through feedback of the MMPI-2 in terms of symptom relief.

Five of the original ten participants and their treating clinicians received feedback of their MMPI-2 results. Feeding back information to clinicians involved

with the participant in an empathic way can contribute to a positive therapeutic alliance between participant and clinician (Finn & Butcher, 1991). Feedback of results of psychological testing can help in understanding behaviours that were previously viewed negatively (Finn & Butcher, 1991). This is particularly salient for participants diagnosed with BPD where, for example, 'difficult and demanding behaviour' regarding self harm can be relabeled 'intense efforts to establish some safety'. Renaming problem behaviours can increase understanding and empathy in treating clinicians, which can then benefit the participant directly.

Overall, participants stated they took part in the research to help others. This is in accordance with research findings from other research (e.g. Cook & Bosley, 1995). This result may reflect an aspect of participants' seeking social support through participation in the research process. However, this result also indicates that patients diagnosed with BPD can put themselves through quite a painful experience relating their childhood trauma history in order to help others. The fact that the participants were able to do this illustrates inner strength and the capacity to help others.

#### 6.4.1 Methodological issues

It is important to consider how the methodology of Study Two may have impacted on results. For example, because the TREEQ was developed specifically for evaluation of reactions to Study One, pilot study of the questionnaire was not possible as the items would have been irrelevant to any person who had not participated in Study 1. For this reason, the questionnaire was developed to be primarily of an exploratory nature, and one of the aims of its construction was to generate hypotheses for future research.

It is possible that the five point Likert scales may not have been sufficiently discriminatory in the small sample, particularly for the small number of Relationship Scale items. This may have impacted on results in masking more discriminatory changes. Pilot study of the questionnaire would have shed light on scaling problems.

The fact that the questionnaire was mailed to respondents may have increased respondents' feeling of anonymity and placed less pressure for an immediate response. The issue of interviewer bias is also circumvented through mail-out of questionnaires. These factors would increase expected reliability of the TREEQ. However, because the researcher was not present when respondents answered the questionnaire there was no opportunity for any questions arising from the TREEQ to be answered.

It is possible that the positive Relationship Scale results may have been due to social desirability bias (Nederhoff, 1985). Social desirability bias occurs when the participant tends to "deny socially undesirable traits and to claim socially desirable ones" (Nederhoff, 1985: 264). This is particularly so because all three Relationship Scale questions were positively worded. However, it has been concluded in a review of methods of coping with social desirability bias that mailed surveys are one of the methods of data collection least effected by social desirability bias (Nederhoff, 1985). Solitary self-administration has also been found to reduce social desirability bias somewhat, however it is vulnerable to self-deceptive bias (Nederhoff, 1985). Therefore, although the positive Relationship Scale questions may have been effected by self-deceptive bias, methodological factors are expected to have reduced social desirability bias. Thus results from Study Two show that the participants diagnosed with BPD were able to come together with a researcher and connect on a level that

allowed them to feel safe enough to tell their trauma history and feel positive about the experience.

## 6.5 Conclusion

Although participants reported no symptom change between Study One and Study Two, they reported the relationship with the researcher as positive, and that they took part in the research to help others. Although these results may have reflected social desirability bias, tighter methodology would have minimised these effects (Nederhoff, 1985). Aspects that may have contributed to the positive findings were the sense of safety established in the relationship; the use of Rogerian conditions of empathy, unconditional positive regard and maintenance of a non-judgmental stance (Raskin & Rogers, 1989); and the benefits for participants of telling their story and tolerating the pain that this entailed.

The effect on participants of participating in clinical research is a very important question, which should be considered in all psychological research undertakings. Results from Study Two show that people can take part in demanding research asking difficult and upsetting questions, and still experience this in a reasonably positive light. Psychodynamic understandings of the therapeutic relationship, such as the relationship as a holding environment with the capacity to tolerate a history of childhood trauma, are useful percepts in understanding why the participants may have experienced the research relationship as positive. Psychodynamic understandings can be utilised in future research undertakings to not only minimise harm, but to maximise possible benefits to the participants.



## CHAPTER 7

### CONCLUSION AND FUTURE DIRECTIONS

#### 7.1 Conclusion

BPD is a clinically and conceptually complex disorder. This research has highlighted the complexity of BPD, and shed light on current issues relating to it. The research broadened the path set in the literature which explored the overlap between BPD, PTSD and childhood history of trauma.

The research questions may now be answered. It was found that participants diagnosed with BPD did have a childhood trauma history and symptoms of stress disorders, including dissociation. Therefore the answer to questions one and two are yes. The personality structure among participants diagnosed with BPD was found to be consistent as shown by the MMPI-2 profile. However, Rorschach results were less conclusive and further research is required to investigate the personality structure of participants diagnosed with BPD using the Rorschach Test.

The finding that dissociation was not positively related to severity of adult personality profile, severity of post traumatic stress symptomatology or severity of childhood trauma was explained and extended via case studies and negative case analysis. Participants symptoms showed a two-way effect of PTSD, and participants were found to have experienced the full range of PTSD symptoms from dominance of psychic numbing, dominance of re-experiencing the trauma and a mixture of the two.

Negative case analysis also shed light on other quantitative findings. One of the most important of these was that the one person who did not score for emotional neglect was found to have experienced emotionally distant parents in childhood. This

situation may have obtained a positive score for emotional neglect after further probing in interview. The fact that the participant did not report her parents as emotionally neglectful, despite interview data suggesting the contrary, raises the question of whether the perception of emotional neglect in childhood leads to this effect in adulthood, and whether the reverse is true: that the perception that parents were not emotionally neglectful, despite evidence to the contrary, mitigates the effect of emotional neglect in childhood on adult personality. This situation led to the conclusion that 100% of the sample reported emotional neglect in childhood, and pointed out that quantitative results can disguise or simplify the severity of childhood trauma history. This finding also raised questions regarding the reliability and validity of the TAI.

The research path in the literature has primarily used quantitative methodology to answer simple yes or no questions and explore relationships between a small number of variables. The present negative case analysis emphasised the number of variables involved in human lives, and the extreme difficulty of reducing a history of this complexity down to key events that lead to adult difficulties. Reducing the phenomenology of a complex disorder such as BPD to simple relationships between variables such as sexual abuse and dissociation results in an inaccurate picture of the disorder.

The methodology used in the current research has shown strength in eliciting the complexity of the phenomenon of BPD, and maintaining an experiential focus on individuals as well as the sample as a whole. This methodology has also illustrated the necessity of maintaining the complexity of the phenomena when attempting to

understand the whole person—beyond diagnosis and symptoms. The holistic and experiential focus facilitates deeper understanding of patients and their difficulties.

At the end of Study 1 there were many unanswered questions. For example, there was a clear dichotomy in participants' PTSD symptoms, although two clear syndromes were not identified across the sample. The participants also illustrated a normal capacity for stress tolerance, which is contrary to clinical experience. Some participants showed a degree of resilience, the reason for which was unclear. These questions could be addressed in similar research with a much larger sample. However, the experience in Study One was that of considerable difficulty in recruitment of participants. This difficulty, combined with a consideration of the difficulties of relating a childhood trauma history, lead to Study Two: an investigation of participants' experience of taking part in the research.

Study Two was developed to answer the question of what effect, if any, there was on participants in taking part in Study One. Interestingly, results show that the participants reported their experience of the relationship with the researcher as positive, although this did not translate into symptom reduction. Although the positive finding may have been influenced by social desirability bias, methodological issues such as anonymity through mail-out questionnaire would have minimised this. The researcher's expectation of symptom reduction through debriefing did not materialise. However, the participants showed considerable inner strength in taking part in something that was at times very difficult and painful. The participants overwhelmingly said they took part to help others like themselves, but were also able to take something positive for themselves from the relationship with the researcher.

The results have implications for clinical work. In terms of diagnosis, the finding of uniformity of MMPI-2 profile among the sample in accordance with previous research (Gartner et al., 1989) indicates that the MMPI-2 can be reliably used for diagnosis of BPD. However, it must be kept in mind that two people (16.7%) were not included in the sample due to questions of diagnosis. Although the MMPI-2 may reliably identify a group of patients who have the diagnosis of BPD, there are also patients with this diagnosis who do not fit the profile. It is likely that these patients do not have BPD, or that there are different types of BPD which can be identified using the MMPI-2. The current results are not sufficient to explore this hypothesis due to the small sample size and the fact that of the two participants whose data were not included in the study only one completed the MMPI-2. The diagnosis of BPD therefore remains somewhat murky in clinical practice, and the reliable MMPI-2 profile indicates that the MMPI-2 may be useful in addressing questions of differential diagnosis.

The finding of significant childhood trauma histories and adult post traumatic stress symptomatology also has implications for treatment. The findings suggest that methods used in PTSD therapies and treatment may be applicable to treating BPD, and may be integrated into existing treatment regimes.

Theoretical understanding of BPD has come from a variety of schools of thought. Psychodynamic theory has understood BPD as originating with a disruption in the separation-individuation phase of development (Kernberg, 1975). Linehan's biosocial theory has put forward that BPD occurs through emotional dysregulation, which has itself arisen from the interaction between an invalidating environment, genetic factors and individual temperament (Linehan & Kehrer, 1995). Beck's

cognitive theory of BPD posited that patients have three basic assumptions that guide their behaviour and from which arise a pattern of dichotomous thinking (Beck et al., 1993).

Some support has been found in the current research for the specific theories of BPD. However, specific theories of BPD have overall been found to be lacking with regard to reconciling empirical findings of childhood trauma history and adult personality profile from a developmental framework. Specific theories of BPD have also been found to be lacking in providing an understanding of the impact of childhood trauma on personality development culminating in the severe psychological distress that is BPD.

Herman's trauma theory has encompassed the diagnosis of BPD and taken into account empirical findings of childhood trauma histories in BPD patients (e.g. Herman et al., 1989; Oldham et al., 1996; Shearer, 1994). A trauma framework can aid further understanding of BPD by incorporating the effects of childhood trauma. However, Herman's trauma framework is not restricted to BPD and therefore does not adequately explain the phenomenology of BPD as a serious and entrenched personality disorder. It is useful to extend possible frameworks of understanding by reference to general theories of personality, such as that of Erikson (1969).

Erikson's (1969) theory of psychosocial development across the lifespan has provided a framework to understand the impact of childhood trauma on personality development. Erikson's (1969) theoretical framework has also explained how the lack of basic trust in infancy can culminate in a lack of a coherent sense of self in adolescence. The framework also provides some understanding of the relationship difficulties that are included in criteria for diagnosis of BPD (APA, 1994). However,

Erikson's framework does not adequately follow through to the complex symptomological picture of BPD, which can involve transient dissociative episodes, mood swings, self-harm and paranoid ideation (APA, 1994).

A major treatment option for people diagnosed with BPD has been psychodynamic psychotherapy, based on Kernberg's approach (1975). The object relations theory of BPD has been found to have insufficiently incorporated empirical findings of trauma experiences throughout childhood. However, object relations therapy has a focus on the therapeutic relationship. In the therapeutic relationship the patient may be able to develop the basic trust and sense of identity that he or she has not developed in childhood and adolescence. The therapeutic relationship can thus provide the safe environment that was lacking in the patient's childhood. Discussion of Erikson's theory of development suggests that therapies that focus on the formation of basic trust and beginning of understanding of identity are useful in treating BPD.

The present research achieved the aim of exploring the phenomenology and experience of BPD and the consideration of the impact of childhood trauma history on personality development and adult personality profile, and raised many issues for future research.

## 7.2 Future Directions

There are many more questions arising from this piece of research than are answered. Results from the present research warrant further investigation of the following issues:

### 7.2.1 Clinical issues

- Typologies of PTSD in BPD and implications of these on should be investigated. Present results warrant separate measurement of PTSD syndromes.
- The association between the psychic numbing aspects of PTSD and dissociation is unclear. Traditional trauma theory posits that the numbing symptoms of PTSD and dissociation are aspects of the response to overwhelming trauma
- The effect of participating in clinical research, including methods of maximising the experience for participants and reducing clinicians' resistance in referring research participants should be investigated. Evaluation of the impact of participating in clinical research should be incorporated into all clinical studies. The use of the TAI in the current research may have constituted the first step in a debriefing model. The onus should be on researchers to follow through the debriefing process comprehensively. This issue highlights the blurred line between research and treatment.
- The concept of strength through surviving a childhood trauma history and how that strength may be utilised to combat psychological distress in adulthood.
- Resilience and its protective role in the development of BPD in children who have traumatic experiences should be investigated. The positive MMPI-2 and Rorschach results of Study One indicate that the participants have some normal processes, yet have had abnormal experiences that have distorted their personality.
- Investigation of BPD through a theoretical framework of normal personality development and the determination of specific deviations from the norm are warranted. This has been attempted here using Erikson's stage theory of development (Erikson, 1969).

- Further investigation is required of BPD from the clinician's perspective and the impact this may or may not have on patient treatment.
- Insufficient attention has been paid both here and in previous research to revictimisation in adulthood of participants diagnosed with BPD.

### 7.2.2 Methodological issues

- Further development of standardized measures of childhood trauma history is required. Most researchers in this area develop their own instrument, which has resulted in difficulty in comparing results across studies. One standardized instrument may solve this difficulty. The TAI was found to be relatively easy to use, although the scoring criteria were at times contradictory, and may be better used as categorical rather than ordinal data. This has raised questions of the validity of the TAI. However, results from the present research using the TAI generally compare well to other studies using the TAI (e.g. Herman et al., 1989; Saxe et al., 1993). Further research using the TAI will contribute to its reliability and validity and provide a standard means of measuring childhood trauma history.
- Future research investigating BPD should control for psychotherapy experience as the variable may confound results in terms of reducing levels of disturbance shown on clinical measures of patients who are in psychotherapy.
- The normal capacity for stress tolerance found on the Rorschach for four participants is contrary to anecdotal evidence from clinicians referring to the study. Some clinicians expressed the concern that participation in the research process would be too stressful for the participant. This issue warrants further investigation.
- Quantitative research should be verified with qualitative research to allow for the complexity of human experience across the lifespan, which must necessarily be



involved in investigation of personality disorder. Quantitative research has also been shown in the present research to disguise clinical types. Qualitative research can partially redress this issue in clinical research.

- Patients with childhood trauma history and BPD should be compared to patients with childhood trauma history without BPD to control for childhood trauma history and investigate more specifically the aetiology of BPD.
- Investigation of interviewer's sex and the impact this may or may not have on eliciting childhood trauma history.

The main lessons that may be taken from the current research are that BPD is a very complex psychiatric disorder with many variables that are difficult to measure. Research has predominantly asked questions framed for yes or no answers. Findings from the current research show that BPD is too complex a disorder to be investigated via simple yes or no questions. Previous focus on dissociation in BPD as a reflection of severity of childhood trauma has also been found to be simplistic and inadequate in explaining adult reflections of childhood trauma history. Further case study research, combined with collection of collaborative data, may make inroads in maintaining complexity and fleshing out the picture of BPD and the effect of trauma on personality development. Ultimately, longitudinal studies on children suffering trauma are essential to promote understanding of the development of personality disorder.

---

## References

Alarcon, R., Deering, C., Glover, S., Ready, D., & Eddelman, C. (1997). Should there be a clinical typology of posttraumatic stress disorder? Australian and New Zealand Journal of Psychiatry, 31, 159-167.

American Psychiatric Association (1980). Diagnostic and statistical manual of mental disorders (Third Edition.). Washington DC: American Psychiatric Association.

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (Fourth Edition.). Washington DC: American Psychiatric Association.

Barker, C., Pistrag, N., & Elliott, R. (1994). Research methods in clinical and counseling psychology. Chichester, UK.: John Wiley & Sons.

Beatson, J., & Chopra, H. (1988). Depression, separation and deprivation in Borderline Personality Disorder. Individual Journal of Clinical Psychology, 15, 12-18.

Beck, A. T. (1978). Depression inventory. Philadelphia: Centre for Cognitive Therapy.

Beck, A. T., Freeman, A., & associates. (1993). Cognitive therapy of personality disorders. New York: The Guilford Press.

Becker, D., & Lamb, S. (1994). Sex bias in the diagnosis of Borderline Personality Disorder and Posttraumatic Stress Disorder. Professional Psychology: Research and Practice, 25, 55-61.

Becker, L. E., Sanders, B., & Chinsky, J. M. (1995). Mediation of abusive childhood experiences: Depression, dissociation, and negative life outcomes. American Journal of Orthopsychiatry, 65, 560-573.

Bernstein, E. M., & Putnam, F. W. (1986). Development, reliability, and validity of a dissociation scale. Journal of Nervous and Mental Disease, 174, 727-735.

Bloom, L., & Truatt, G. (1978). Therapeutic factors in psychotherapy: The use of psychological tests. Journal of Clinical Psychology, 34, 513-518.

Brems, C. (1991). Depression and personality disorder: Differential diagnosis with the MMPI. Journal of Clinical Psychology, 47, 669-675.

Briere, J., & Elliott, D. (1993). Sexual abuse, family environment, and psychological symptoms: On the validity of statistical control. Journal of Consulting and Clinical Psychology, 61, 284-288.

Brodsky, B. S., Cloitre, M., & Dulit, R. A. (1995). Relationship of dissociation to self-mutilation in childhood abuse in Borderline Personality Disorder. American Journal of Psychiatry, 152, 1788-1792.

Brown, G. (1993). Borderline states: Incest and adolescence. Journal of Analytic Psychology, 38, 23-35.

Brown, G., & Anderson, B. (1991). Psychiatric morbidity in adult inpatients with childhood histories of sexual and physical abuse. American Journal of Psychiatry, 148, 55-61,

Bussell, D. A., Matsey, K.C., Reiss, D., & Hetherington, M. (1995).  
Debriefing the family: Is research an intervention? Family Process, 34, 145.

Butcher, J. N., & Graham, John R. (1994). The MMPI-2: A new standard for  
personality assessment and research in counseling settings. Special Issue: The MMPI-  
2. Measurement and Evaluation in Counseling and Development, 27, 131-150.

Cameron, N., & Rychlack, J. (1985). Personality development and  
psychopathology: A dynamic approach. (Second Edition.). Boston: Houghton Mifflin  
Company.

Carlson, E. B., & Putnam, F. (1993). An update on the Dissociative  
Experiences Scale. Dissociation, VI, 16-27.

Cerney, M. (1990). The Rorschach and traumatic loss: Can the presence of  
traumatic loss be detected from the Rorschach? Journal of Personality Assessment,  
53, 781-789.

Cook, A., & Bosley, G. (1995). The experience of participating in  
bereavement research: Stressful or therapeutic? Special Issue: Ethics and  
bereavement research. Death Studies, 19, 157-170.

Curtis, J. (1995). Elements of critical incident debriefing. Psychological  
Reports, 77, 91-96.

Erikson, E. H. (1969). Childhood and society. New York: Penguin Books.

Exner, J. (1993a). The Rorschach: A comprehensive system (Second Edition.). New York: John Wiley & Sons.

Exner, J. (1993b). The Rorschach: A comprehensive system (Third edition.). New York: John Wiley & Sons.

Exner, J. E. (1986). Some Rorschach data comparing schizophrenics with borderline and schizotypal personality disorders. Journal of Personality Assessment, 50, 455-471.

Finn, S., & Butcher, J. (1991). Clinical objective personality assessment. In Hersen, M., Kazdin, A., & Bellack, A. (Eds). The clinical psychology handbook. (pp. 362-374). New York: Pergamon Press.

Finn, S. & Tonsager, M. (1992). Therapeutic effects of providing MMPI-2 feedback to college students awaiting therapy. Psychological Assessment, 4, 278-287.

FitzGerald, M. L., Braudaway, C., Leeks, D., Padgett, M., et-al. (1993). Debriefing: A therapeutic intervention. Military Medicine, 158, 542-545.

Fonagy, P., Leigh, T., Steel, M., Steele, H., Kennedy, R., & Mattoon, G. (1996). The relation of attachment status, psychiatric classification, and response to psychotherapy. Journal of Consulting and Clinical Psychology, 64, 22-31.

Freud, S. (1910/1962). Two short accounts of psycho-analysis: Five lectures on psycho-analysis, the question of lay analysis. Singapore: Penguin.

Freud, S. (1914/1963). Further recommendations on the technique of psychoanalysis: Recollection, repetition, and working through. In P. Rieff (Eds.), Sigmund Freud: Therapy and technique New York: Collier Books.

Freud, S. (1917/1966). Introductory lectures on psycho-analysis. New York: W. W. Norton & Company.

Gabbard, G. O. (1995). Psychodynamic psychiatry in clinical practice: The DSM-IV edition. Washington DC.: American Psychiatric Press.

Gandolfo, R. L., Templer, D. I., Cappelletty, G. G. & Cannon, W. G. (1991). Borderline, depressive, and schizophrenic discrimination by MMPI. Journal of Clinical Psychology, 47, 783-789.

Gartner, J., Hurt, S. W., & Gartner, A. (1989). Psychological test signs of borderline personality disorder: A review of the empirical literature. Journal of Personality Assessment, 53, 423-441.

Golden, C. (1978). Implications of the interviewer's technique on selection criteria. In Davanloo, H. (1978). Basic principles and techniques in short-term dynamic psychotherapy. Northvale, N.: Jason Aronson, Inc.

Goodwin, J., Simms, M., & Bergman, R. (1979). Hysterical seizures: A sequel to incest. American Journal of Orthopsychiatry, 49, 698-703.

Graham, J. R. (1990). MMPI-2: Assessing personality and psychopathology. New York.: Oxford University Press:.

Groth-Marnat, G. (1990). Handbook of psychological assessment (Second Edition.). New York: John Wiley & Sons.

Guzder, J., Paris, J., Zelkowitz, P., & Marchessault, K. (1996). Risk factors for borderline pathology in children. Journal of the American Academy of Child and Adolescent Psychiatry, 35(1), 26-33.

Hathaway, S. R., & McKinley, J. (1991). MMPI-2: Manual for administration and scoring. Minneaopolis: University of Minnesota Press.

Herman, J. L. (1992). Trauma and recovery: From domestic abuse to political terror. London: Pandora.

Herman, J., Perry, C., & van der Kolk, B. (1989). Childhood trauma in Borderline Personality Disorder. American Journal of Psychiatry, 146, 490-495.

Hills, H. A. (1995). Diagnosing personality disorders: An examination of the MMPI-2 and the MCMI-II. Journal of Personality Assessment, 65, 21-34.

Judd, C. M., Smith, E. R., & Kidder, L. H. (1991). Research methods in social relations: International edition (Sixth edition.). Chicago: Holt, Rinehart and Winston.

Keane, T. M., Malloy, P. F., & Fairbank, J. A. Empirical development of an MMPI subscale for the assessment of combat-related posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, 52, 888-891.

Kernberg, O. (1975). Borderline conditions and pathological narcissism. Northvale: Jason Aronson.

Kirby, J., Chu, J., & Dill, D. (1993). Correlates of dissociative symptomatology in patients with physical and sexual abuse histories. Comprehensive Psychiatry, 34, 258-263.

Landecker, H. (1992). The role of childhood sexual trauma in the etiology of Borderline Personality Disorder: Considerations for diagnosis and treatment. Psychotherapy, 29, 234-242.

Lauer, J., Black, D. W., & Keen, P. (1993). Multiple Personality Disorder and Borderline Personality Disorder: Distinct entities or variations on a common theme? Annals of Clinical Psychiatry, 5, 129-134.

Linehan, M. (1995). Cognitive-behavioral treatment of borderline personality disorder. Guildford Press: New York.

Linehan, M., & Kehrer, C. A. (1995). Borderline Personality Disorder. In D. H. Barlow (Eds.), Clinical handbook of psychological disorders: A step-by-step treatment manual (pp. 396-441.). New York: The Guilford Press.

Litz, B. T., Penk, Walter, E., Walsh, Suellen., Hyer, Lee., et al. (1991). Similarities and differences between MMPI and MMPI-2 applications to the assessment of posttraumatic stress disorder. Journal of Personality Assessment, 57, 238-253.



Ludolph, P. S., Westen, D., Mistle, B., Jackson, A., Wixom, J., & Wiss, C. (1990). The borderline diagnosis in adolescents: Symptoms and developmental history. American Journal of Psychiatry, 147, 470-476.

Malan, D. H. (1995). Individual psychotherapy and the science of psychodynamics. (2 ed.). Oxford: Butterworth-Heinemann.

Marmer, S., & Fink, D. (1994). Rethinking the comparison of Borderline Personality Disorder and Multiple Personality Disorder. Psychiatric Clinics of North America, 17, 473-771.

McDougall, J. (1989). Theatres of the body: A psychoanalytic approach to psychosomatic illness. New York: Norton.

McEwen, I. R., & Karlan, G. R. (1990). Case studies: Why and how. Augmentative and Alternative Communication, 6, 67-75.

Miller, H. R., Goldberg, J., & Streiner, D. (1995). What's in a name? The MMPI-2 PTSD scales. Journal of Clinical Psychology, 51, 626-631.

Mitchell, J. T. (1983). When disaster strikes: The critical incident debriefing process. American Journal of Emergency Services, 3, 6-26.

Modell, A. (1993). "The holding environment" and the therapeutic action of psychoanalysis. In Goldman, D. (Ed). In one's bones: The clinical genius of Winnicott. (pp. 273-291). Northvale, N.: Jason Aronson.

Nash, M., Hulse, T., Sexton, M., Harralson, T., & Lambert, W. (1993). Long-term sequelae of childhood sexual abuse: Perceived family environment, psychopathology, and dissociation. Journal of Consulting and Clinical Psychology, 61, 276-283.

Noblitt, J. (1995). Psychometric measures of trauma among psychiatric patients reporting ritual abuse. Psychological Reports, 77, 743-747.

Nederhoff, A. (1958). Methods of coping with social desirability: A review. European Journal of Social Psychology, 15, 263-280.

Oldham, J. M., Skodo, A., E., Gallaher, P., & Kroll, M. E. (1996). Relationship of borderline symptoms to histories of abuse and neglect: A pilot study. Psychiatric Quarterly, 67, 287-295.

Paris, J., Zweig-Frank, H., & Guzder, J. (1994). Psychological risk factors for Borderline Personality Disorder in female patients. Comprehensive Psychiatry, 35, 301-305.

Perry, J. C., Herman, J., & van der Kolk, B. A. (1992). Rating guidelines for the Traumatic Antecedents Interview (TAI).

Plummer, K. (1995). Life story research. In J. A. Smith, R. Harre, & L. V. Langenhove (Eds.) Rethinking methods in psychology. (pp. 50-63). New York: Sage Publications.

Raskin, N. J., & Rogers, C. (1989). Person-Centered Therapy. In R. J. Corsini, & Wedding, D. (Eds.), Current psychotherapies Itasca: F.E. Peacock Publishers, Inc.

Richards, A. (1979). Case histories I. Penguin Freud Library Vol 8, London, Penguin.

Salzberger-Wittenberg, I. (1970). Psycho-analytic insight and relationships: A Kleinian approach. London: Routledge.

Saunders, E. A. (1991). Rorschach indicators of chronic childhood sexual abuse in female borderline patients. Bulletin of the Menninger Clinic, 55, 48-71.

Saxe, G., van der Kolk, B., Berkowitz, R., Chinman, G., Hall, K., Lieberg, G., & Schwartz, J. (1993). Dissociative disorders in psychiatric inpatients. American Journal of Psychiatry, 150, 1037-1042.

Schlenger, W. W., & Kulka, R. A. (1987). Performance of the Keane-Fairbank MMPI scale and other self-report measures in identifying post-traumatic stress disorder. Paper presented at the American Psychological Association meetings, New York, NY. In Hathaway, S. R., & McKinley, J. (1991). MMPI-2: Manual for administration and scoring. Minneapolis: University of Minnesota Press.

Shearer, S. L. (1994). Dissociative phenomena in women with Borderline Personality Disorder. American Journal of Psychiatry, 151, 1324-1328.

St Clair, M. (1986). Object relationships and self psychology: An introduction. Brooks Cole: Belmont Ca.

van der Kolk, B., Perry, C., & Herman, J. (1991). Childhood origins of self-destructive behaviour. American Journal of Psychiatry, 148, 1665-1671.

van der Kolk, B. A., & Ducey, C. P. (1989). The psychological processing of traumatic experience: Rorschach patterns in PTSD. Journal of Traumatic Stress, 2(3), 259-274.

van der Kolk, B. (1996). The complexity of adaptation to trauma: Self-regulation, stimulus discrimination, and characterological development. In van der Kolk, B. A., McFarlane, A. C., Weisaeth, L. (Eds). Traumatic stress: The effects of overwhelming experience on mind, body, and society. (Pp.182-213). Guildford: New York.

Victorian In-Service Nurse Education, (1994). Critical incident stress debriefing for nurses. Health and Community Services, Victoria.

Wadsworth, Y. (1997). Everyday evaluation on the run. (Second edition).: Sydney: Allen and Unwin.

Waldinger, R., Sweet, C., Frank, A., & Miller, K. (1994). Levels of dissociation and histories of reported abuse among women outpatients. Journal of Nervous and Mental Disease, 182(, 626-630.

Weaver, T., & Clum, G. (1993). Early family environments and traumatic experiences associated with Borderline Personality Disorder. Journal of Consulting and Clinical Psychology, 61, 1068-1075.

Weiner, I. B. (1993). Clinical considerations in the conjoint use of the Rorschach and the MMPI. Journal of Personality Assessment, 60, 148-152.

Weiner, I. B. (1995). Methodological considerations in Rorschach research. Psychological Assessment, 7, 330-337.

Young, J. (1987). Schema-focused cognitive therapy for personality disorders. Unpublished manuscript, Centre for Cognitive Therapy, New York. In A. T. Beck, Freeman, A., & Associates. (1993). (Eds.), Cognitive therapy of personality disorders New York.: The Guilford Press.

Zalewski, C. A., & Robert P. (1991). Assessment of borderline personality disorder: A review of MMPI and Rorschach findings. Journal of Nervous and Mental Disease, 179, 338-344.

Zlotnick, C., Shea, M., Zakriski, A., Costello, E., Begin, A., Pearlstein, T., & Simpson, E. (1995). Stressors and close relationships during childhood and dissociative experiences in survivors of sexual abuse among inpatient psychiatric women. Comprehensive Psychiatry, 36, 207-212.

Zweig-Frank, H., & Paris, J. (1991). Parents' emotional neglect and overprotection according to the recollections of patients with Borderline Personality Disorder. American Journal of Psychiatry, 148, 648-651.

Zweig-Frank, H., Paris, J., & Guzder, J. (1994). Dissociation in female patients with borderline and non-borderline personality disorders. Journal of Personality Disorders, 8, 210-218.

Appendix I

Symptom Checklist

Dear clinician,

As part of my study titled Borderline Personality Disorder: Aetiology and Symptomatology, I am seeking to recruit people with Borderline Personality Disorder. Having discussed this study previously, I would like to now follow through to the next stage of the study by having you answer the question at the end of the page, and then fill in the checklist on the next page. I will contact you shortly to discuss the next step in the process.

As a reminder, this study has research and ethics approval to conduct the study within the Western Health Care Network.

Thanks for your cooperation. If any questions arise, please do not hesitate to contact me or my supervisor, Denise Charman, at the Department of Psychology at Victoria University of Technology on 9365 2536.

Nicole Milburn.

1. Has your client been diagnosed with Borderline Personality Disorder? (Tick box if yes)

By you

☐

By someone else

☐

Has not been diagnosed by has symptomatology

☐

Has not been diagnosed and does not have symptomatology

☐

Code \_\_\_\_\_

**SYMPTOM CHECKLIST**

Please indicate if your patient displays the following symptoms by ticking the box at the right of the page.

1. Frantic efforts to avoid real or imagined abandonment

☐
2. A pattern of unstable and intense interpersonal relationships characterised by alternating between extremes of idealisation and devaluation

☐
3. Identity disturbance: markedly and persistently unstable self-image or sense of self

☐
4. Impassivity in at least two areas that are potentially self-damaging (eg. spending, sex, substance abuse, reckless driving, binge eating).

☐
5. Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour.

☐
6. Affective instability due to a marked reactivity of mood

☐
7. Chronic feelings of emptiness

☐
8. Inappropriate, intense anger or difficulty controlling anger

☐
9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

☐



Appendix II

Traumatic Antecedents Questionnaire

1/1/90  
(Herman & van der Kolk)

Study \_\_\_\_\_ Subjects Code Number \_\_\_\_\_  
Code Name (Pseudonym) \_\_\_\_\_ Date \_\_\_\_\_

PART ONE: DEMOGRAPHICS

- 1) sex

1. male

2. female

1) \_\_\_\_\_
- 2) age at last birthday

2) \_\_\_\_\_
- 3) marital status

1. Single, never married

2. married

3. Single, living with mate

4. separated

5. divorced

6. widowed

3) \_\_\_\_\_
- 4) present religious identification

1. Catholic

2. Protestant

3. Jewish

4. Other

5. none

4) \_\_\_\_\_
- 5) role of religion in current life

1. Minor

2. major, positive

3. major, negative

5) \_\_\_\_\_
- 6) religion of upbringing

1. Catholic

2. Protestant

3. Jewish

4. Other \_\_\_\_\_

5. none

6) \_\_\_\_\_
- 7) role of religion in upbringing

1. Minor

2. major, positive

3. major, negative

7) \_\_\_\_\_

8) ethnic/racial background

1. White, Anglosaxon
2. White, Irish
3. White, Italian
4. White, other \_\_\_\_\_
5. Black, northern city
6. Black, southern
7. Latino (country of origin) \_\_\_\_\_
8. Asian
9. other

8) \_\_\_\_\_

9) education

1. < 12th grade (years completed) \_\_\_\_\_
2. Completed high school
3. h.s + other training
4. some college (years completed) \_\_\_\_\_
5. Completed college
6. Postgraduate education \_\_\_\_\_
7. Postgraduate degree \_\_\_\_\_

9) \_\_\_\_\_

10) occupation \_\_\_\_\_

11) current employment

1. Full-time student
2. Employed full time
3. Employed part time
4. homemaker
5. unemployed
6. disabled
7. retired
8. Other \_\_\_\_\_

11) \_\_\_\_\_

12. estimate current household income \_\_\_\_\_/year

12) \_\_\_\_\_

13. Number of people in household: for each member of household record:

13) \_\_\_\_\_

first name	age	sex	relationship to subject
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

14) number of children (including those not currently living with subject)

14) \_\_\_\_\_

15) people subject relies on for practical help

first name	age	sex	relationship to subject
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

16) people subject relies on for emotional support

first name	age	sex	relationship to subject
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PART 2: CURRENT HEALTH

17) health self-rating	1. excellent 2. good 3. fair 4. poor	17) _____
------------------------	---	-----------

18) number of days sick in past year	18) _____
--------------------------------------	-----------

19) cigarettes (packs/day) (score 0-3 or more)	19) _____
---	-----------

20) alcohol consumption/wk	_____
----------------------------	-------

20a) days drinking per week	20a) _____
-----------------------------	------------

20b) drinks/24 hours	20b) _____
----------------------	------------

20c) type of drink	1. beer 2. Wine/wine cooler 3. vodka/gin 4. whisky/scotch 5. other _____	20c) _____
--------------------	--	------------

20d) was there a time in your life that you had a drinking problem?	1. yes 2. no	20d) _____
---	-----------------	------------

If yes, dates and circumstances \_\_\_\_\_

---

---

---

21) prescription medications \_\_\_\_\_

21a) length of time used \_\_\_\_\_

21b) was there a time in your life that you thought taking \_\_\_\_\_ 21b)

these medicines was causing a problem for you?

- 1. yes
- 2. no

If yes, dates and circumstances \_\_\_\_\_

---

---

---

22) have you ever taken illegal drugs on a regular basis? \_\_\_\_\_ 22)

- 1. yes
- 2. no

22a) which ones? \_\_\_\_\_ 22a)

- 1. marijuana
- 2. Heroin/other narcotics
- 3. barbiturates
- 4. Other sleeping medicines, like Quaaludes
- 5. amphetamines
- 6. cocaine
- 7. LSD and other hallucinogens
- 8. other

22b) was there a time in your life that you thought taking \_\_\_\_\_ 21b)

these drugs was causing a problem for you?

- 1. yes
- 2. no

If yes, quantity, dates and circumstances \_\_\_\_\_

---

---

---

23) major illnesses                      current \_\_\_\_\_

past \_\_\_\_\_

24) major accidents or injuries (include self-inflicted injuries and suicide attempts)

---



---

24a) if injurious behaviours    frequency 1. Yes. 2. No                      24a) \_\_\_\_\_

1. cutting
2. burning
3. hanging
4. Poisoning or overdosing
5. gunshot
6. Hitting or banging

24b) Age of onset of SIB                      24b) \_\_\_\_\_

25) hospitalisations

a) medical                      how many times \_\_\_\_\_                      25a) \_\_\_\_\_

at what ages \_\_\_\_\_

for how long \_\_\_\_\_

b) psychiatric                      how many times \_\_\_\_\_                      25b) \_\_\_\_\_

at what ages \_\_\_\_\_

for how long \_\_\_\_\_

26 pregnancies (number and outcome)                      26) G \_\_, P \_\_, Ab \_\_, M \_\_

### PART THREE: FAMILY OF ORIGIN DEMOGRAPHICS

27) birthplace \_\_\_\_\_

28) where spent most of childhood (till age 16) \_\_\_\_\_

29) number of moves before age 16                      29) \_\_\_\_\_

30) persons in childhood household (0-absent, 1-present)                      30) \_\_\_\_\_

- |                            |          |
|----------------------------|----------|
| 1. mother                  | 1. _____ |
| 2. father                  | 2. _____ |
| 3. Siblings (number) _____ | 3. _____ |
| 4. stepmother              | 4. _____ |
| 5. stepfather              | 5. _____ |

6. Stepsiblings (number)\_\_\_\_\_

7. Half siblings (number)\_\_\_\_\_

8. Grandmother (M or P)\_\_\_\_\_

9. Grandfather (M or P)\_\_\_\_\_

10. Other \_\_\_\_\_
6. \_\_\_\_

7. \_\_\_\_

8. \_\_\_\_

9. \_\_\_\_

10. \_\_\_\_

31) birth order :  
# \_\_\_\_\_

of \_\_\_\_\_ siblings

31) \_\_\_\_\_

32) father's occupation\_\_\_\_\_

33) mother's  
occupation\_\_\_\_\_

34) father's education\_\_\_\_\_

35) mother's education\_\_\_\_\_

36) who in family was affectionate to you (0-no, 1-yes)

36) \_\_\_\_\_

1. mother

2. father

3. sibling(s)

4. grandmother

5. grandfather

6. other\_\_\_\_\_

7. No one
1. \_\_\_\_

2. \_\_\_\_

3. \_\_\_\_

4. \_\_\_\_

5. \_\_\_\_

6. \_\_\_\_

7. \_\_\_\_

37)was affection

1. Reliable and consistent

2. Unreliable or inconsistent

3. other\_\_\_\_\_

37) \_\_\_\_\_

38) was there anyone who recognised you as a special person?

0. no

1. Yes (specify)\_\_\_\_\_

38) \_\_\_\_\_

39) if yes, what happened to this relationship? (describe).

40) was there anyone you felt safe with growing up?

0. no

1. Yes (specify) \_\_\_\_\_

40) \_\_\_\_\_

41) if yes, what happened to this relationship? (describe)

PART 4: CHILDHOOD CARETAKERS AND SEPARATIONS

42) primary caretaker before age 16 (use list from item 30) 42) \_\_\_\_\_

43) ever separated from that person for more than a few weeks? 43) \_\_\_\_\_  
 0. no  
 1. yes

44) if yes: number of episodes 44) \_\_\_\_\_

45) if yes: describe for each episode: (use additional  
 sheets for more than one episode)  
 subject's age at time of separation

length of separation

reason for separation

person who assumed care taker role during separation

46) any deaths in immediate family prior to age 16 46) \_\_\_\_\_  
 0. no  
 1. yes

(use additional sheets for more than one episode)

relationship of family member to subject

subject's age at time of death

47) serious illnesses/hospitalisations in family before age 16 (include 47) \_\_\_\_\_  
 explicit question regarding mental illness)  
 0. no  
 1. yes

48) absences of other family members prior to age 16  
 0. no  
 1. yes

relationship of family member to subject

---

subject's age at time of separation

---

length of separation

---

reason for separation

---

(use additional sheets for more than one episode)

49) age first lived away from home 49) \_\_\_\_\_

50) circumstances of leaving home (describe).

51) ever attempt to run away from home? 51) \_\_\_\_\_

- 0. no
- 1. yes

52) if yes: number of episodes  
describe age, duration, circumstances of each episode

## PART FIVE: PEER RELATIONSHIPS AND CHILDHOOD STRENGTHS

53) description of friendships in childhood 53) \_\_\_\_\_

- 1. Two or more close friends
- 2. One close friend
- 3. Imaginary companion or friend
- 4. No close friends

54) description of friendships in adolescence: 54) \_\_\_\_\_

- 1. Two or more close friends
- 2. One close friend
- 3. Imaginary companion or friend
- 4. No close friends

55) description of peer group in childhood: 55) \_\_\_\_\_

- 1. Belonged to positively identified group
- 2. On fringes of positively identified group



3. Belonged to negatively identified group
4. On fringes of negatively identified group
5. Did not belong to group

56) description of peer group in adolescence

56) \_\_\_\_\_

1. Belonged to positively identified group
2. On fringes of positively identified group
3. Belonged to negatively identified group
4. On fringes of negatively identified group
5. Did not belong to group

57) relationships with siblings: (0-no one; 1 or more)

57) \_\_\_\_\_

1. Close (with \_\_\_\_\_) 1. \_\_\_\_
2. Distant ( \_\_\_\_\_) 2. \_\_\_\_
3. Hostile ( \_\_\_\_\_) 3. \_\_\_\_
4. Caretaker ( \_\_\_\_\_) 4. \_\_\_\_
5. Cared for (by \_\_\_\_\_) 5. \_\_\_\_

58) was there something you were good at as a child?  
(E.g. sports, hobby, schoolwork, creative activity?)

58) \_\_\_\_\_

0. no
1. yes (describe) \_\_\_\_\_

## PART SIX FAMILY ALCOHOLISM

59) family customs regarding alcohol

77) \_\_\_\_\_

1. Never allowed at home
2. Used on special occasions
3. Used daily around mealtime
4. Used regularly in large quantities

60) ever suspect any family member had drinking problem

60) \_\_\_\_\_

0. no
1. yes

60a) who (use scale from question 30)

\_\_\_\_\_ 60a) \_\_\_\_\_

61) if yes, for each person describe:

relationship \_\_\_\_\_

onset \_\_\_\_\_

duration \_\_\_\_\_

severity of symptoms \_\_\_\_\_

current status \_\_\_\_\_

61a) has alcohol, in your view, been the cause of any of the following? 61) \_\_\_\_\_

1. Family or marital problems or divorce
2. Problems with or loss of job
3. Financial problems
4. Medical problems (gastritis, cirrhosis, pancreatitis)
5. Inability to care for self or household
6. Accidents or arrests for DWI
7. Physical fights
8. Troubles with the law

Describe the type of drinker:

62) 1. Daily-usual amount-type of alcohol \_\_\_\_\_ 62) \_\_\_\_\_

2. Weekend- usual amount-type of alcohol \_\_\_\_\_

3. Binge- usual amount-type of alcohol \_\_\_\_\_

63) did you ever seek help from anyone because of a family members drinking problem? 63) \_\_\_\_\_

0. no

1. Yes, Al-Anon

2. Yes, other \_\_\_\_\_

64) if # 63 is yes: were efforts to get help successful? 64) \_\_\_\_\_

0. no

1. yes

## PART SEVEN: FAMILY DISCIPLINE AND CONFLICT RESOLUTION

65) who made rules and enforced discipline at home 65) \_\_\_\_\_  
(Score 0-no; 1-yes)

- |       |           |          |
|-------|-----------|----------|
| _____ | 1. mother | 1. _____ |
| _____ | 2. father | 2. _____ |
| _____ | 3. other  | 3. _____ |

66) description of family rules 66) \_\_\_\_\_

1. Clear and consistent
2. unclear
3. Rules inconsistent or changed frequently

67) considered rules usually fair

0. no

1. yes

67) \_\_\_\_\_

68) usual means of disciplining children (0-no; 1-yes)

1. scolding

2. Withholding privileges

3. spanking

4. Verbal abuse

5. hitting

6. Hitting with object

68) \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

69) estimated frequency of punishment \_\_\_\_\_/month

70) usual way parents solved their disagreements (0-no; 1-yes)

1. Never saw parents angry or fighting

2. Talked things over

3. yelling

4. Threatening to hit other person

5. Breaking or throwing things

6. hitting

7. Threatening to leave

8. Leaving temporarily

69) \_\_\_\_\_

70) \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

71) ever witness violence in family

0. no

1. yes

71) \_\_\_\_\_

72) if yes: how often did this happen

1. once

2. A few times (est# )

3. Frequently (est # )

72) \_\_\_\_\_

73) if yes, for each incident specify

perpetrator	victim	subject's age at time of occurrence
_____	_____	_____
_____	_____	_____

description of incident

\_\_\_\_\_

\_\_\_\_\_

how upsetting was this incident to subject at time

1. Not at all
2. Not very
3. somewhat
4. very
5. extremely

subject's estimate of incident's effect on life:

73) \_\_\_\_\_

1. great
2. moderate
3. little
4. none

use additional sheets for more than one episode if incidents were repeated

74) was there a gun in the house?

74) \_\_\_\_\_

0. no
1. yes

75) if yes: was it ever used against anyone

75) \_\_\_\_\_

0. no
1. Yes, to threaten
2. Yes, gun fired

76) anyone in household ever receive medical attention as a result of violence at home:

76) \_\_\_\_\_

0. no
1. Yes  
(describe \_\_\_\_\_)

77) ever seek help to limit violence at home

77) \_\_\_\_\_

0. no
1. Yes  
(describe \_\_\_\_\_)

78) if yes were efforts to get help successful

78) \_\_\_\_\_

0. no
1. Yes

79) since age 16 ever involved in physical fight that included hitting, punching, or use of weapon?

79) \_\_\_\_\_

0. no
1. Yes

80) if yes, how many times has this happened?

80) \_\_\_\_\_

1. once
2. A few times (est # \_\_\_\_\_)

3. Frequently (est # )

81) if yes: for each incident specify

perpetrator

victim

subject's age at time of  
occurrence


description of incident

Figure 1: Schematic representation of the experimental design. The figure is divided into two main sections: 'Pretest' and 'Main Experiment'. The 'Pretest' section includes 'Pretest 1' (N=10) and 'Pretest 2' (N=10). The 'Main Experiment' section includes 'Main Experiment 1' (N=20) and 'Main Experiment 2' (N=20). Each section shows a sequence of steps: 'Introduction', 'Practice', 'Test', 'Feedback', and 'Debrief'. The 'Main Experiment' section also includes a 'Debrief' step. The 'Main Experiment' section is further divided into 'Main Experiment 1' and 'Main Experiment 2'.

how upsetting was this incident to subject at time:

81) \_\_\_\_\_

1. Not at all
2. Not very
3. somewhat
4. very
5. extremely

81A) subject's estimate of incident's effect on life:

81A) \_\_\_\_\_

1. great
2. moderate
3. little
4. none

use additional sheets for more than one episode

if incidents were repeated with same perpetrator and victim, estimate frequency of incidents \_\_\_\_\_

## PART EIGHT: EARLY SEXUAL EXPERIENCES

82) source of most sexual information (0-no; 1-yes)

82) \_\_\_\_\_

- |             |                    |
|-------------|--------------------|
| 1. mother   | 1. <u>        </u> |
| 2. father   | 2. <u>        </u> |
| 3. siblings | 3. <u>        </u> |
| 4. friends  | 4. <u>        </u> |
| 5. lovers   | 5. <u>        </u> |
| 6. other    | 6. <u>        </u> |

83) parental attitudes toward children's sexual curiosity

83) \_\_\_\_\_

1. punitive 1. —
2. Embarrassed and secretive 2. —
3. Generally accepting and respectful 3. —
4. Intrusively involved 4. —

84) able to ask questions or discuss sex with any family member

84) \_\_\_\_\_

0. no  
1. yes

85) if yes: person subject could talk to \_\_\_\_\_

86) before age 16 anyone ever try or succeed in having any kind of sexual contact with you? 85) \_\_\_\_\_

0. no  
1. yes  
2. Not sure

87) if yes: for each incident describe  
subject's age                      age and relationship of perpetrator

---

---

---

---

duration                      frequency                      type of sexual contact


use of force or means of coercion

was the sexual contact a secret? )

how upsetting was this incident to the subject at time: 87) \_\_\_\_\_

1. Not at all
2. Not very
3. somewhat
4. very
5. extremely

87a) subject's estimate of incident's effect on life: 87a) \_\_\_\_\_

1. great
2. moderate
3. little
4. none

88) Sometimes when people think about their sexual experiences they forget to include experiences that may have happened with family members. Before you were age 16, did you have any sexual experiences that involved people related to you?

0. no 88) \_\_\_\_\_  
1. yes

2. Not sure

89) if answer to #88 is yes: for each incident describe  
subject's age                      age and relationship of perpetrator


duration                      frequency                      type of sexual contact


use of force or means of coercion \_\_\_\_\_

---

was the sexual contact a secret? ) \_\_\_\_\_

How upsetting was this incident to subject at time

89)

1. Not at all
2. Not very
3. somewhat
4. very
5. extremely

89a) subjects estimate of incident's effect on life:

89a)

1. great
2. moderate
3. little
4. none

use additional sheets for more than one episode

90) if answer to #88 or #89 is yes: before age 16 ever tell anyone or try to get help because unwanted sexual experience?

90)

0. no  
1. yes

91) if #90 is yes: were efforts to get help successful?

91)

0. No ( describe)  
1. Yes (describe)

92) after age 16 anyone ever pressure or force you into unwanted sexual contact? 92) \_\_\_\_\_

0. no  
1. yes

93) if answer to #92 is yes: for each incident describe:

subject's age

age and relationship of perpetrator

\_\_\_\_\_

duration

frequency

type of sexual contact

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

use of force or means of coercion

---

---

was the sexual contact a secret? ) \_\_\_\_\_

How upsetting was this incident to subject at time

93) \_\_\_\_\_

1. Not at all
2. Not very
3. somewhat
4. very
5. extremely

93a) subjects estimate of incident's effect on life:

93a)

1. great
2. moderate
3. little
4. none

use additional sheets for more than one episode

94) if answer to #92 is yes after age 16 ever tell anyone or try to get help because of unwanted sexual experience

94)

0. no  
1. Yes (specify)



95) if #94 is yes: were efforts to get help successful?

95) \_\_\_\_\_

0. No (describe)

1. Yes (describe)

PART NINE REVIEW AND SUMMARY

96) of all traumatic experiences discussed, which has had most serious or lasting effects on life?

96) \_\_\_\_\_

1. Death of someone close

2. Physical illness of someone close

3. Mental illness of someone close

4. Alcohol problem in someone close

5. Physical abuse by someone close

6. Sexual abuse by someone close

7. Physical assault by acquaintance or stranger

8. Sexual assault by acquaintance or stranger

9. other

97) effect on life: impact of events scale (Select Most Stressful Incident)

98) what has been most helpful in overcoming the traumatic effects of these events?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

99) what advice would you give to others on the basis of your experiences.

\_\_\_\_\_

\_\_\_\_\_

100) what advice would you give to psychiatrists and other mental health professionals?

\_\_\_\_\_

\_\_\_\_\_

ADDITIONAL COMMENTS

## Appendix III

### Edited scoring criteria for the TAI

#### A. Abuse

The TAI scoring criteria for the three categories of abuse are:

1. Physical abuse: includes i) physical punishment which is clearly sadistic or out of control, as well as the following actions: ii) beating with a fist or object, or iii) kicking, or iv) subjecting a child to treatment such as electric shock or burning which causes prolonged pain, physical damage (such as bruises, cuts or broken bones), terror or fear of death or dismemberment.

2. Sexual abuse involves any sexual touching or fondling, as well as explicit sexual activity, including all forms of sexual intercourse, whenever it is between an adult or sibling and the child, or when it is non-consensual between peers.

This does not include approaches which are verbal only, such as propositions for sex or 'dirty talk', which the subject might find offensive or uncomfortable.

3. Witnessing domestic violence includes incidents in which the subject reasonably fears that someone will be seriously hurt or killed, as well as actual fights or threats of physical harm (eg. pointing a gun in an argument, despite not using it).

This does not include hearsay accounts of violence about which the subject heard but which he or she did not directly see or hear at the time of occurrence (Perry et al., 1992, p. 4).

#### B. Neglect

The TAI scoring criteria for neglect are:

1. Physical Neglect refers to the caretaker's gross neglect of the child's physical needs including: safety from physical harm, and adequate food, shelter, clothing, medical attention and physical supervision.

2. Gross Emotional Neglect. This refers to a caretaker's lack of appropriate attention to the child's emotional distress or suffering, or pressing need, as well as the total lack of affection. This category is meant to encompass those gross acts of negligence which all would recognise as such, and does not include more subtle forms of neglect, lack of guidance etc (Perry et al., 1992, p. 5-6).

#### C. Separation and loss

The TAI scoring criteria for separation and loss include "those separations from caretakers which are significant either due to their duration, seriousness of the

reason, or other circumstances which give it a traumatic meaning. ... to be deemed significant, the caretaker must have a significant role in the child's life. ...

Losses are those due to permanent separation or death. Given the ubiquity of loss (for instance, deaths of grandparents or other relatives are common in childhood), only those losses are counted which represent the loss of a significant caretaker." (Perry et al., 1992, p. 6).

#### D. Chaos

The TAI scoring guidelines for chaos are as follows:

Domestic chaos "reflects the absence of predictability in the home environment. This includes an absence of rules and predictable enforcement, or inconsistent or changeable rules, or lack of a minimal level of regular occurrences such as meals, bedtime, help going to school, and generally providing some expectations for day to day behaviour. To be scored, chaos should be striking, not equivocal." (Perry et al., 1992, p. 7).

## Appendix IV

## Dissociative Experiences Scale (DES)

## DES

Eve Bernstein Carlson, Ph. D.

Frank W. Putman, M. D.

### DIRECTIONS

This questionnaire consists of twenty-eight questions about experiences that you may have in your daily life. We are interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you **are not** under the influence of alcohol or drugs. To answer the questions, please determine to what degree the experience described in the question applies to you and circle the number to show what percentage of the time you have the experience.

Example:

0% (never)	10	20	30	40	50	60	70	80	90	100% (always)
---------------	----	----	----	----	----	----	----	----	----	------------------

1. Some people have the experience of driving a car and suddenly realising that they don't remember what has happened during all or part of the trip. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

2. Some people find that sometimes they are listening to someone talk and they suddenly realise that they did not hear part or all, of what was just said. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

3. Some people have the experience of finding themselves in a place and having no idea how they got there. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

4. Some people have the experience of finding themselves dressed in clothes that they don't remember putting on. Circle a number to show what percentage of the time this happens to you.

0% 10 20 30 40 50 60 70 80 90 100%

5. Some people have the experience of finding new things among their belongings that they do not remember buying. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

6. Some people sometimes find that they are approached by people that they do not know who call them by another name or insist that they have met them before. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

7. Some people sometimes have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

8. Some people are told that they sometimes do not recognise friends or family members. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

9. Some people find that they have no memory for some important events in their lives (for example, a wedding or graduation). Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

10. Some people have the experience of being accused of lying when they do not think that they have lied. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

11. Some people have the experience of looking in a mirror and not recognising themselves. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

12. Some people sometimes have the experience of feeling that other people, objects, and the world around them are not real. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

13. Some people sometimes have the experience of feeling that their body does not seem to belong to them. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

14. Some people have the experience of sometimes remembering a past event so vividly that they feel as if they were reliving that event. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

15. Some people have the experience of not being sure whether things that they remember happening really did happen or whether they just dreamed them. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

16. Some people have the experience of being in a familiar place but finding it strange and unfamiliar. Mark the line to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

17. Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

18. Some people sometimes find that they become so involved in a fantasy or daydream that it feels as though it were really happening to them. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

19. Some people find that they sometimes are able to ignore pain. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

20. Some people find that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

21. Some people sometimes find that when they are alone they talk out loud to themselves. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

22. Some people find that in one situation they may act so differently compared with another situation that they feel almost as if they were two different people. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

23. Some people sometimes find that in certain situations they are able to do things with amazing ease and spontaneity that would usually be difficult for them (for example, sports, work, social situations, etc.). Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

24. Some people sometimes find that they cannot remember whether they have done something or have just thought about doing that thing (for example, not knowing whether they have just mailed a letter or have just thought about mailing it). Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

25. Some people find evidence that they have done things that they do not remember doing. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

26. Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

27. Some people sometimes find that they hear voices inside their head that tell them to do things or comment on things that they are doing. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

28. Some people sometimes feel as if they are looking at the world through a fog so that people and objects appear far away or unclear. Circle a number to show what percentage of the time this happens to you.

0%    10    20    30    40    50    60    70    80    90    100%

## Appendix V

Approval of the Research and Ethics Committee of the Western Healthcare Network



## ROYAL PARK HOSPITAL

ACCREDITED BY THE AUSTRALIAN COUNCIL ON HOSPITALS STANDARDS

ADDRESS ALL MAIL TO  
PRIVATE BAG NO 3 PG  
MORWELL VICTORIA 3652

ROYAL PARK RESEARCH & ETHICS COMMITTEES

SERVING HEALTH & COMMUNITY SERVICES  
FACILITIES IN HEALTH REGIONS 1, 2 & 6

PARK STREET  
MORWELL VICTORIA 3652  
TELEPHONE (03) 369 7222  
FAX (03) 368 0302

CONTRACT WITH RESEARCHERS  
RESEARCH & ETHICS CONTRACT FOR APPROVAL  
RESEARCH PROJECT

REFERENCE NO.

I, NICOLE MILBURN acknowledge that I have Research & Ethics  
Committee approval for the project

DISSOCIATION AND POST TRAUMATIC STRESS  
SYMPTOMATOLOGY IN BORDERLINE PERSONALITY DISORDER

I agree to observe the following conditions:-

- (1) To obtain approval of the hospital Superintendent/ Director of Clinical Services where appropriate.
- (2) To comply with the conditions as outlined in the final and Committee approved copy of the research protocol.
- (3) I agree that any variation to the approved protocol or Plain Language Statement requires Research & Ethics Committee review, rewrite and consent.
- (4) To provide a report by the 31st December each year or upon request by the Research and Ethics Committees. Failure to do this means cessation of the research protocol and re-application to the Committee must occur before recommencing.
- (5) To provide a report on completion of the project and a copy of the published material where applicable.
- (6) To ensure that the confidentiality and anonymity of all subjects and their records will be preserved at all times in the manner set out in the protocol.
- (7) To provide all researchers and research participants with the Ethics Committee statement on monitoring research projects and a signed copy of the consent form when in use.

Signed: Nicole Milburn (Researcher) Dated: 2/6/97

Date of Final Approval Given by Research Committee: 20/3/96

Date of Final Approval Given by Ethics Committee: 27/3/97

Signed (Ethics Committee Representative): 

PLEASE NOTE: FAILURE TO COMPLY WITH THIS CONTRACT WILL RESULT IN  
IMMEDIATE CANCELLATION OF THE APPROVAL TO CONDUCT THE PROJECT



## Appendix VI

Approval Of The Victoria University Ethics Committee.

## VICTORIA UNIVERSITY

Psychology Department Ethics Committee

Evaluation Form

Name of Student:

Nicola Milburn

Name of Supervisor:

Denise Cherman

Title of Project:

Borderline personality disorders

Recommendations:APPLICATION APPROVEDComments:

Name of Chair of Ethics Committee

Signature of

## Appendix VII

### Letter of Introduction

#### **RESEARCH OPPORTUNITY!**

Hi, my name is Nicole Milburn and I'm a student of the Doctorate of Psychology (Clinical Psychology) course at Victoria University. As part of this course I am conducting research with clients who attend this community mental health clinic. This research aims to understand the childhood experiences of clients of mental health clinics and how these experiences may impact on every day life. To achieve this, the research involves you spending some time with me talking about yourself and helping me to understand a bit about you and your life. There will also be some time spent filling out some forms.

Your participation in this research is entirely voluntary and you can decide to withdraw at any time. Your participation also does not effect your treatment at the clinic in any way, and confidentiality will be observed.

If you'd like to know more about the research you can tell your case worker that you're interested and I can then contact you, or alternatively, you can contact me at the Department of Psychology at Victoria University of Technology on 9365 2536 and we can arrange a time to get together to talk about it further.

I hope to hear from you soon.

Yours sincerely

Nicole Milburn

---

## Appendix VIII

### Plain Language Statement

People who attend mental health clinics sometimes report similar childhood experiences and have experiences that are at times difficult to describe.

I am a student in the Doctor of Psychology (Clinical Psychology) course at Victoria University. I would like your help in a research project, under the supervision of Ms Denise Charman, which aims to understand these childhood experiences and current symptoms in order to improve treatment programs in the future.

I would like to ask you to spend about one and a half hours with me on two separate days. The first time we meet I will ask you to fill out some questionnaires. The second time we meet I will ask you to reflect upon childhood experiences in an interview. Your participation is voluntary and your decision will not affect your current or future treatment. You may of course withdraw from the study at any stage, without consequences for your treatment.

Some of the tests may require me to re-contact you at a later stage to complete one further test. If you are asked to be involved further it will involve approximately one hour.

It may be beneficial for your treatment for your case manager or doctor to be aware of some of the things we discuss. If this situation eventuates you and I can discuss it and how we would like to proceed with that. Reports of the research will be mainly in group form and no individual will be identified.

If you have any questions please contact:

Ms Nicole Milburn or            9365 2536  
Ms Denise Charman

If you would like to help you can inform your case manager and then I will call you and arrange a convenient time for us to meet and discuss this study further.

Thank you.

— — —

Nicole Milburn.

Appendix IX

Voluntary Consent Form

CONSENT TO PARTICIPATE IN A RESEARCH PROJECT ON CHILDHOOD EXPERIENCE AMONG CONSUMERS OF PSYCHIATRIC SERVICES.

I, Nicole Milburn, CERTIFY THAT I have fully explained the aims, risk, and procedures of the research to the PERSON named herein (or to their lawful guardian) and have handed to the person/guardian a copy of this consent together with a PLAIN LANGUAGE STATEMENT of the aims and procedures of the experiment and any risks to the person.

In my opinion the person (or legal guardian) appears to understand and wishes to participate.

I undertake to the person/legal guardian that the confidentiality and anonymity of the person and his or her records will be preserved at all times.

SIGNED \_\_\_\_\_ DATE\_\_\_\_\_

CONSENT OF A PATIENT

The purpose of the above project has been fully explained to me and I have read and signed the attached PLAIN LANGUAGE STATEMENT. I UNDERSTAND the aims and procedures of the experiment and any risks to myself which are involved and I REQUEST to participate on condition that I can withdraw my consent at any time.

SIGNED \_\_\_\_\_ DATE\_\_\_\_\_

# Appendix X

## Trauma Research Experiences Evaluation Questionnaire (TREEQ)

Please circle a number below.

**1. I felt I was able to trust the researcher.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**2. I felt the researcher was able to cope with the things I was telling her.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**3. I thought if I told my story, that harm might come to me.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**4. I felt the researcher believed what I said.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**5. I felt better for having told my story.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**6. I felt that things were more mixed up after I spoke to the researcher.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**7. The times I feel unconnected to reality or off in a dream seem to have increased since talking to the researcher.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree
6				
Not applicable				

**8. I have felt more anxious since talking to the researcher.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**9. I have had fewer flashbacks and/or nightmares since talking to the researcher.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree
6				
Not applicable				

**10. I have felt more depressed since talking to the researcher.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**11. Since talking to the researcher, I have known who I am a bit more.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

**12. I mainly took part in the research to help other people rather than helping myself.**

1	2	3	4	5
strongly agree	agree	not sure	disagree	strongly disagree

COMMENTS.

I have been wondering how you have been going since we last met, and would like you to write a few comments below about how you are feeling, whether any major things have happened in your life since we last spoke, and anything you'd like to say about the experience of being in the research.

Remember that your answers are completely confidential and that you do not have to identify yourself if you do not wish to.

So:

How are you feeling?

Any major events happened?

Your experience of participating in the research?

Number of months since you were seen by the researcher: \_\_\_\_\_

## Appendix XI

## Study Two Cover Letter

Dear Participant,

Some time ago you were kind enough to assist me in my research into the childhood history of people who come to clinics. You filled out a very long questionnaire, spent time talking with me, and you may also have completed the Inkblot Test. Your participation in this research is greatly appreciated, and I anticipate that some very useful information will come out of the process.

After our time together I realised that we do not know much about the way people feel about participating in this type of research. I believe this information is important: it will assist researchers to tailor their projects and questions to minimise discomfort to the participants; and it will help participants to know what to expect when they cooperate with this type of research project. For these reasons I would like to ask you to take some time to answer the small number of questions I have enclosed.

After you have finished answering the questions please put the question sheet in the pre-paid envelope provided and post it to me. You may notice that there are no identifying marks on the question sheet. This is so that your answers are completely confidential, and I cannot trace them back to what you have told me already. However, if you would like me to know who you are, please feel free to put your name on your answer sheet.

Thank you very much for your assistance with this research; I assure you that your participation has been greatly appreciated.

Good luck in the future.

Yours sincerely,

---

Nicole Milburn.



