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# **An exploration of eating distress and traumatic experiences in women and the effectiveness of dialectical behaviour therapy**

by  
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A thesis submitted in partial fulfilment of the requirements for the  
degree of Doctor in Clinical Psychology (D. Clin. Psych)

Coventry University, Faculty of Health and Life Sciences and the  
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**Declaration**

This research was carried out under the supervision of Dr. Helen Liebling-Kalifani, Dr. Carolyn James and Dr. Ian Hume. The ideas underpinning the research and design were collaborated with the named supervisors.

I have collected all the data myself along with the transcription and analysis of all interviews. The interviews were peer reviewed to check the validity of my analysis. My supervisors have checked drafts of the thesis and apart from the aforementioned collaborations; the thesis is of my own work.

The literature review is being prepared for submission to the Journal of Clinical Psychology (Magrath, Liebling-Kalifani and James). The empirical paper is being prepared for submission to the International Journal of Eating Disorders (Magrath, Hume, Liebling-Kalifani and James).

This thesis has not been submitted for any other degree or at any other institution.

## **Abbreviations and Measures**

<b>AAT</b>	<b>Appetite Awareness Training</b>
<b>ACGT</b>	<b>Active Comparison Group Therapy</b>
<b>AF-DBT</b>	<b>Appetite Focussed Dialectical Behaviour Therapy</b>
<b>AN</b>	<b>Anorexia Nervosa</b>
<b>AN-R</b>	<b>Anorexia Nervosa-Restrictive sub-type</b>
<b>AN-BP</b>	<b>Anorexia Nervosa-Binge-Purge sub-type</b>
<b>APA</b>	<b>American Psychiatric Society</b>
<b>ASI</b>	<b>Addiction Severity Index (McLellan, Kusher, Metzger, Peters, Smith, Grisson &amp; Pettinati, 1992)</b>
<b>BAI-2</b>	<b>Beck Anxiety Inventory-2 (Beck &amp; Steer, 1990)</b>
<b>BDI</b>	<b>Beck Depression Inventory (Beck, Ward, Mendelson, Mock &amp; Erbaugh, 1961)</b>
<b>BDI-II</b>	<b>Beck Depression Inventory-II (Beck, Steer &amp; Brown, 1996)</b>
<b>BED</b>	<b>Binge-Eating Disorder</b>
<b>BES</b>	<b>Binge-Eating Scale</b>
<b>BMI</b>	<b>Body Mass Index</b>
<b>BN</b>	<b>Bulimia Nervosa</b>
<b>BPD</b>	<b>Borderline Personality Disorder</b>
<b>CAT</b>	<b>Cognitive Analytical Therapy</b>
<b>CBT</b>	<b>Cognitive Behavioural Therapy</b>
<b>DARE</b>	<b>Cochrane Database of Systematic Reviews and The Centre for Reviews and Dissemination</b>
<b>DBT</b>	<b>Dialectical Behaviour Therapy</b>
<b>DERS</b>	<b>Difficulties in Emotion Regulation Scale (Gratz &amp; Roemer, 2004)</b>

<b>DTCQ-8</b>	<b>Drug Taking Confidence Questionnaire-8 (Sklar &amp; Turner, 1999)</b>
<b>DSM-IV</b>	<b>Diagnostic and Statistical Manual of Mental Disorders (4<sup>th</sup> Edition) (American Psychiatric Association, 1994)</b>
<b>DSM-V</b>	<b>Diagnostic and Statistical Manual of Mental Disorders (5<sup>th</sup> Edition) (American Psychiatric Association, 2013)</b>
<b>EDE</b>	<b>Eating Disorder Examination (Fairburn &amp; Cooper, 1993)</b>
<b>EDE-Q</b>	<b>Eating Disorder Examination-Questionnaire version (Fairburn &amp; Beglin, 1994)</b>
<b>EDI</b>	<b>Eating Disorders Inventory (Garner, Olmsted &amp; Polivy, 1983)</b>
<b>EDI-2</b>	<b>Eating Disorders Inventory-2 (Garner, 1991)</b>
<b>EDI-B</b>	<b>EDI (as above)- Bulimia</b>
<b>EDI-BD</b>	<b>EDI- Body Dissatisfaction</b>
<b>EDI-DT</b>	<b>EDI- Drive for Thinness</b>
<b>EDI-IA</b>	<b>EDI- Interoceptive Awareness</b>
<b>EDI-ID</b>	<b>EDI- Interpersonal Distrust</b>
<b>EDI-IN</b>	<b>EDI- Ineffectiveness</b>
<b>EDI-MF</b>	<b>EDI- Maturity Fears</b>
<b>EDI-P</b>	<b>EDI- Perfectionism</b>
<b>EDNOS</b>	<b>Eating Disorders Not Otherwise Specified</b>
<b>EES</b>	<b>Emotional Eating Scale (Arnow, Kenardy &amp; Agras, 1995)</b>
<b>ES</b>	<b>Effect Size</b>
<b>IA-E</b>	<b>Interoceptive Awareness Scale- Expanded (Craighead &amp; Niemeier, 2002)</b>
<b>IPA</b>	<b>Interpretative Phenomenological Analysis</b>
<b>IPDE</b>	<b>International Personality Disorder Examination (Loranger, 1995)</b>

<b>IPT</b>	<b>Interpersonal Therapy</b>
<b>IRAS</b>	<b>Integrated Research Application System</b>
<b>LPC</b>	<b>Lifetime Parasuicide Count (Linehan &amp; Comtois, 1996)</b>
<b>MACR-32</b>	<b>Mizes Anorectic Cognitions Scale-Revised (Mizes, Christiano, Madison, Post, Seime &amp; Varnado, 2000)</b>
<b>MPQ</b>	<b>Multidimensional Personality Questionnaire (Tellegen &amp; Waller, 1994)</b>
<b>NICE</b>	<b>National Institute for Health and Clinical Excellence</b>
<b>NMRS</b>	<b>Negative Mood Regulation Scale (Cantanzaro &amp; Mearns, 1990)</b>
<b>PANAS</b>	<b>Positive and Negative Affect States (Watson, Clark &amp; Tellegen, 1988)</b>
<b>PDQ-4</b>	<b>Personality Diagnostic Questionnaire-4 (Hyler, 1994)</b>
<b>PEWS</b>	<b>Preoccupation Eating Weight and Shape Scale (Craighead &amp; Niemeier, 1999)</b>
<b>RSES</b>	<b>Rosenberg Self-Esteem Scale (Rosenberg, 1979)</b>
<b>SASII</b>	<b>Suicide Attempt Self-Injury Interview (Linehan, Comtois, Brown, Heard &amp; Wagner, 2006)</b>
<b>SCID I</b>	<b>Structured Clinical Interview for DSM-IV Axis I (First, Spitzer, Gibbon &amp; Williams, 1995)</b>
<b>SCID II</b>	<b>Structured Clinical Interview for DSM-IV Axis II (First, Gibbon, Spitzer, Williams &amp; Benjamin, 1997)</b>
<b>SCL-90-R</b>	<b>Hopkins Symptoms Checklist Revised (Derogatis, 1977)</b>
<b>SD</b>	<b>Standard Deviation</b>
<b>SHI</b>	<b>Social History Interview (Linehan &amp; Heard, 1994)</b>

**SIAB-EX      Structured Inventory for Anorectic and Bulimic Syndromes**  
**(Fichter & Quadflieg, 2001)**

**TSI            Treatment History Interview (Linehan & Heard, 1987)**

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## **SUMMARY**

This doctoral thesis examines the effectiveness of dialectical behaviour therapy for eating disorders, and explores the lived experience of women with eating distress who also have a history of trauma.

The first chapter uses meta-analytic procedures to critically review the current literature to determine whether dialectical behaviour therapy can be regarded as an effective treatment for individuals with eating disorders. The treatment effects across a range of measures were explored, as well as a discussion of the methodological limitations and recommendations for future research. The implications for clinical practice are also considered.

The second chapter is an empirical study using a qualitative approach to explore the experiences of eating distress and trauma in women. Women were interviewed to determine their views on the development, daily experience and treatment of their eating distress. The clinical implications and recommendations for future research are discussed, including methodological limitations.

The final chapter provides a reflective account of the author's experience of conducting sensitive research with women with eating distress.

# **Chapter 1: Literature Review**

## **A Meta-Analytic Review of Dialectical Behaviour Therapy for Eating Disorders**

This paper has been prepared for submission to the Journal of  
Clinical Psychology

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(exclusive of figures, tables and references)

## **1.1 Abstract**

Using quantitative, meta-analytic procedures, this review explores the research on dialectical behaviour therapy for eating disorders. A meta-analytic review allows the author to predict the strength of research findings through closer inspection of the literature. The aim of this literature review is to determine whether dialectical behaviour therapy (DBT) can be regarded as an effective treatment for the range of eating disorders. A further objective is to examine more closely the treatment effects across measures of affect, rather than eating disorder symptomology in isolation. A total of ten studies met the inclusion criteria. The results indicated that DBT has a positive effect on both eating disorder symptomology outcome measures, as well as measures of affect. As a result of the findings, it is suggested that DBT may be seen as a useful alternative to conventional treatment strategies such as cognitive behavioural therapy. In particular, the evidence suggests DBT may be appropriate for individuals who do not respond to traditional treatment and those with a diagnosis of Binge-Eating Disorder (BED).

**Keywords: ‘eating disorder’, bulimia (BN), anorexia (AN), binge-eating disorder (BED), dialectical behaviour therapy (DBT), meta-analytic review**

## **1.2 Introduction**

Kent and Waller (2000) describe eating disorders as complex mental health difficulties associated with both physical and psychological consequences. An eating disorder is characterised by a disturbance of eating behaviours and weight control strategies, which can result in a clinically significant impairment of psychosocial functioning, wellbeing and physical health (Fairburn, Cooper & Shafran, 2003). Research into eating distress difficulties indicates that eating disorders are often difficult to treat. Crow, Peterson, Swanson, Raymond, Specker, Eckert and Mitchell (2009) suggest that crude mortality rates for anorexia, bulimia and eating disorder not otherwise specified (ED-NOS) are 4%, 3.9% and 5.2% respectively. In particular, the Royal College of Psychiatrists (2006) suggest that if anorexia remains untreated, fifteen percent of sufferers will die from the disorder within twenty years of its onset.

### **1.2.1 Defining Eating Disorders**

The Diagnostic and Statistical Manual of Mental Disorder, DSM-IV (American Psychiatric Association, 1994) identifies three diagnostic sub-types of eating disorder. These are Anorexia Nervosa (AN), Bulimia Nervosa (BN) and Eating Disorders Not Otherwise Specified (EDNOS). Anorexia Nervosa is characterised by disturbances in the way an individual perceives their body, resulting in an intense fear of gaining weight and restrictive eating patterns, which result in individuals with a body weight below that which is normally expected for the individual's age and height (APA, 1994). Bulimia Nervosa is also characterised by an extreme concern about body weight. Binge-eating is present, where the individual engages in compensatory behaviours to prevent and control weight gain through self-induced

vomiting, laxative abuse or excessive exercise (APA, 1994). The final diagnostic category is that of Eating Disorders Not Otherwise Specified (EDNOS). This is used to describe clients whose symptoms do not fulfil the severity or diagnostic criteria for a diagnosis of anorexia or bulimia. It includes binge-eating disorder where individuals binge eat but do not engage in the compensatory behaviours as found with bulimia nervosa (APA, 1994). Whilst binge-eating disorder is not specified in its own right within the DSM-IV, it is anticipated that it will be included in the new version of the DSM-V (American Psychiatric Association, 2013).

There are several therapies currently recommended for the treatment of eating disorders by the National Institute for Health and Clinical Excellence (NICE, 2004). These include cognitive behavioural therapy (CBT) and cognitive analytical therapy (CAT), (Fairburn, Marcus and Wilson, 1993; Treasure and Ward, 1997). However, a sound evidence base for the use of dialectical behaviour therapy (DBT) in the treatment of eating disorders is emerging in the literature. The theory and existing research is reviewed below.

### **1.2.2 The Theory of Dialectical Behaviour Therapy for Eating Disorders**

Dialectical behaviour therapy (DBT) for eating disorders emerged from the seminal work by researchers such as Telch, Agras and Linehan (2000). In its original format, DBT was developed by Linehan (1993a, 1993b) as the treatment of choice for individuals with a diagnosis of borderline personality disorder (BPD), particularly as it aimed at reducing life-threatening and quality of life-impairing behaviour, for example, self-harm. The DBT framework conceptualises pathological behaviours such as self-harm and mood dysregulation as attempts by the individual to manage

strong emotions and distress, and helps clients to introduce more appropriate ways to manage their emotional experiences (Linehan, 1993a, 1993b).

Heatherton and Baumeister (1991) theorised that binge eating can serve to modulate affect. They suggested individuals who binge eat often have difficulty in regulating negative emotions and binge eat in an attempt to cope with their emotional distress. The author's argue that, whilst bingeing provides individuals with temporary relief from negative affect, it simply acts to reinforce the maladaptive eating pattern, rather than address the emotional state appropriately.

Telch, Agras and Linehan (2000) took Heatherton and Baumeister's (1991) theory further and combined it with a DBT framework by suggesting that binge eating behaviour functions in a similar way to that of behaviour characteristically displayed by individuals with BPD. In both cases, emotional experiences arise, leaving the individual feeling distressed and with emotions that are difficult to manage. In the absence of adaptive and effective coping strategies which are effective in coping with these emotional experiences, maladaptive coping strategies are employed in order to reduce the distress. For those with binge eating disorder, attempts to regulate this distressing negative emotional affect are through binge eating.

The seminal paper exploring whether DBT may be effective with an eating disorder population was by Telch et al. (2000). The paper was based on a case study which described the successful treatment of a woman with Binge-Eating Disorder (BED) using DBT skills training (Telch, 1997). The authors adapted Linehan's (1993) programme, which was found to be effective for clients with BPD, for individuals

with BED. They conducted an uncontrolled treatment study with eleven women diagnosed with BED. Each individual attended a manualised training programme, in group format, of twenty sessions of DBT skills training aimed at enhancing their emotional regulation capabilities. Telch et al. (2000) found that 82% of the women treated were abstinent from binge eating at the end of the treatment programme. This improvement was maintained at both 3-month and 6-month post-treatment follow up.

### **1.2.3 Existing Research on DBT for Eating Disorders**

There has been little research conducted on the effectiveness of DBT for binge eating disorder or indeed eating disorders in general. The majority of studies have focussed on BED (Telch, Agras & Linehan, 2001; Safer, Lively, Telch & Agras, 2002; Safer, Robinson & Jo, 2010; Robinson & Safer, 2011; Safer & Joyce, 2011). However DBT treatment has been extended to both bulimic and anorexic populations (Safer, Telch & Agras, 2001; Salbach-Andrae, Bohnkamp, Pfeiffer, Lehmhuhl & Miller, 2008; Hill, Craighead & Safer, 2011). Research has also included studies of populations with co-morbid diagnoses of both an eating disorder and BPD or substance misuse (Chen, Matthews, Allen, Kuo & Linehan, 2008; Ben-Porath, Wisniewski & Warren, 2009; Kroger, Schweiger, Sipos, Klien, Arnold, Schunert & Reinecker, 2010; Courbasson, Nishikawa & Dixon, 2011).

Each of the studies cited above are described in further detail below. Of these, ten were identified as data to be used in the meta-analysis. A summary table of these 10 studies can be found in Appendix 1.



### **1.2.3.1 DBT for Binge-Eating Disorder**

Research has generally adopted an uncontrolled research design or case series design, with very few studies including a control group of ‘treatment as usual’ or alternative treatment (Telch et al. 2001; Safer et al. 2010). In addition to this, the outcome measures used to determine efficacy vary widely across/between each study, looking not only at eating symptomology, but also affect and weight.

The research carried out by Telch et al. (2000), was followed up by a study by Telch, Agras and Linehan (2001). Telch et al. (2001) evaluated the use of DBT, with participants who had binge eating disorder, where 44 women with a BED diagnosis were randomly assigned to either a DBT group (N = 22) or a wait list control group (N = 22). Each participant was assessed using the Eating Disorder Examination (Fairburn & Cooper, 1993), as well as for baseline measures of weight, mood and affect regulation. At post-treatment, the authors found that the women in the DBT group had achieved significant improvements on their binge eating symptomology in comparison to the waiting list control group, where both binge days and episodes had significantly decreased-  $F(1,31) = 41.3, p < .001$  and  $F(1,31) = 39.9, p < .001$  respectively. For those women who participated in the DBT group, 89% were found to be abstinent from binge eating (no bingeing in the last 4 weeks), compared with 12.5% of women in the wait list control group. At 6 month follow-up, abstinence rates had reduced to 56%. These results do, however, show promising treatment effects after a DBT treatment group for BED.

Safer, Robinson and Jo (2010) followed up the recommendations from the paper by Telch and colleagues (2001) by also using a control group where the DBT group was

compared with a control group which participated in an active comparison group therapy (ACGT). This allowed for the control of the hypothesised effects of the DBT treatment. Again, participants were assessed using the Eating Disorder Examination (Fairburn & Cooper, 1993), as well as for baseline measures of weight, mood and affect regulation. Participants included both men and women with a DSM-IV diagnosis of BED, where 101 participants were randomly assigned to 20 group sessions of DBT-BED (N= 50) or ACGT (N= 51). Safer et al. (2010) found that at post-treatment binge eating abstinence and reduction in binge frequency was achieved more quickly with DBT-BED than the ACGT group, where the rate of abstinence was 64% and 36% respectively. However, these differences were not continued at 3-, 6- and 12-month follow up.

#### **1.2.3.2 DBT for Anorexia and Bulimia**

Safer, Telch and Agras (2001) turned their attention not only to participants with a diagnosis of BED, but also Bulimia. Safer et al. (2001) randomly assigned 31 women to 20 weeks of DBT (N= 14) or 20 weeks of a waiting-list control condition (N= 15). As assessed by the Eating Disorder Examination (Fairburn & Cooper, 1993), at baseline, participants had a median of 25 objective binge episodes and 32 purge episodes over the last 28 days. At the end of the 20 week treatment, 28.6% of participants from the DBT group were abstinent from binge/purge behaviours, compared with no participants in the control group. The authors found that 35.7% of participants from the DBT group were found to have mild symptoms of bulimia, where they had reduced their number of objective binge eating days by 88% and purging episodes by 89%. Despite these improvements, 35.7% of the DBT group remained symptomatic, continuing to meet the DSM-IV criteria for bulimia. Of the

control group, 13.3% of participants had mild symptoms, but no reduction in number of binge and purge episodes and 80% continued to meet the DSM-IV for bulimia.

Salbach-Andrae, Bohnkamp, Pfeiffer, Lehmhuhl and Miller (2008) introduced a case series study, the first of its kind to look at a child and adolescent population with bulimic and anorexic eating disorder pathology. They recruited 12 females, 6 with anorexia and 6 with bulimia, to take part in a 25-week DBT programme which consisted of weekly 50-minute individual psychotherapy sessions, accompanied by a weekly 100-minute skills training group. All participants were assessed using the Structured Inventory for Anorectic and Bulimic Syndromes (SIAB-EX; Fichter & Quadflieg, 2001), the Eating Disorder Inventory-2 for children and adolescents (EDI-2; German version; Rathner & Waldherr, 1997). Participants' BMI was also measured as a baseline for eating disorder symptomology. Results from the case study found that for all participants with anorexia, there was an increase in BMI from 15.6 to 18.1, where  $t_{(6)}=-4.8$ ,  $p<0.01$ . A significant reduction in vomit frequency, as well as binge frequency was also found, where results from a t-test showed  $t_{(7)}=3.7$ ,  $p<0.05$  and  $t_{(5)}=6.3$ ,  $p<0.01$ . Furthermore, prior to treatment, all participants engaged in food restriction, whereas at post-treatment a reduction in food restriction was reported for 75% of participants, where  $t_{(11)}=3.4$ ,  $p<0.01$ . In comparison to the study by Safer et al. (2001), the authors suggest that the use of DBT in adolescent anorexia and bulimia showed promising results that need follow up confirmation with further randomised controlled trials.

A recent study by Hill, Craighead and Safer (2011) examined the efficacy of a treatment they developed for participants who have a diagnosis of bulimia. The treatment, termed appetite focussed DBT (AF-DBT), was the integration of appetite awareness treatment (AAT) and DBT strategies. AAT is designed to help clients distinguish between physical hunger cues and negative emotional eating cues, as well as support the practice of mindful eating. Hill et al. (2011) assessed 32 women at baseline using the EDE (Fairburn & Cooper, 1993) and randomly assigned them to 12 weekly sessions of AF-DBT (N=18) or to a 6-week delayed treatment control (N=14). The results showed that at post-treatment, 26.9% of the 26 individuals who entered treatment (18 from the initial treatment group and 8 from the delayed control group) were abstinent from binge/purge episodes over the last 28 days. In addition to this, 61.5% no longer met full or sub-threshold criteria for bulimia. The authors suggest that the results from AF-DBT treatment programme, like with other studies, justify further investigation.

#### **1.2.3.2 Co-morbid Studies- DBT for ED and Borderline Personality Disorder or Substance Misuse**

Chen, Matthews, Allen, Kuo and Linehan (2008) looked at co-morbid populations, particularly as it was previously suggested that these are the client groups least likely to respond well to existing treatments (Wilfley, Friedman, Dounchis, Stein, Welch and Ball, 2000). The EDE (Fairburn & Cooper, 1993), Personality Disorders Examination, PDE (Loranger, 1995) and Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II; First, Spitzer, Williams, and Gibbon, 1997) was used to assess individuals. The participant group was assigned to 6 months of weekly skills group and individual DBT. The results showed that at post-treatment

there were improvements on all outcome measures, with medium effect sizes (ES) for the number of non-ED Axis I disorders (ES=0.46), suicidal behaviour and self injury (ES=0.43), and large effect sizes for objective binge eating (ES=1.07) and total EDE scores (ES=1.66). At 6 month follow-up, large effect sizes were found for all outcome measures (ES=1.72, 0.81, 2.00 and 0.97 respectively). As this study was a case series design, the authors suggested that the positive results from this study warrant further investigation in the form of a randomised controlled trial.

Ben-Porath, Wisniewski and Warren (2009) explored co-morbidity with BPD further by looking at whether having a diagnosis of both an eating disorder and BPD affected treatment outcome with DBT. A sample of 40 participants comprising one man and 39 women, participated in a 30 hour per week hospitalisation programme based on DBT for eating disorders. Forty percent of the participants had a co-morbid diagnosis of an eating disorder and BPD, while 60% met criteria for an eating disorder only (anorexia, bulimia or ED-NOS). Participants were assessed at baseline using the EDE-Q (Fairburn and Beglin, 1994), PDQ-4 (Hyler, 1994) as well as additional outcome measures of affect on the Beck Depression Inventory (BDI-II) and Negative Mood Regulation Scale (NMRS). The authors found that on the EDE-Q global scale, all participants reported a reduction in disorder symptoms with a significant ( $p < 0.001$ ) main effect of time. A significant main effect of time on both the BDI-II and NMRS was also reported where  $F(1, 37) = 26.03$ ,  $p \leq 0.001$  and  $F(1,33)=14.33$ ,  $p \leq 0.001$  respectively. Ben-Porath et al. (2009) suggest that the results from this study highlight DBT as an effective treatment for a sub-group of eating disorder patients who, traditionally, are deemed harder to treat.

Following on from Ben-Porath et al. (2009), Kroger, Schweiger, Sipos, Kliem, Arnold, Schunert and Reinecker (2010) investigated the efficacy of an adapted inpatient DBT treatment for 24 women with co-morbid BPD and anorexia (N=9) and bulimia (N=15), who had failed to respond to previous eating disorder inpatient treatments. Participants were assessed at baseline using the German versions of the SCID-II (Fydrich, Renneberg, Schmitz, & Wittchen, 1997) and EDI-2 (Paul & Thiel, 2005). At post-treatment, 38% of participants with anorexia (N=3) had recovered. However, 50% had developed bulimia and one remained anorexic. Just over half of participants with bulimia (53.8%, N= 7) no longer met the criteria for the disorder and 5 participants were abstinent from binge eating episodes. Whilst treatment outcome was more positive for individuals with bulimia, the results appear to replicate those found by Chen et al. (2008), thereby supporting adapted DBT as potentially efficacious for individuals with co-morbid eating disorders and BPD. However, as recommended by previous studies, further research is needed in order to promote these findings further.

A final study, by Courbasson, Nishikawa and Dixon (2011), was the only study located that assessed the effectiveness of DBT with a population of individuals suffering from concurrent eating disorder and substance misuse. Courbasson et al. (2011) conducted a randomised controlled trial with 21 female outpatients diagnosed with co-morbid eating disorder and substance misuse. Participants were randomly assigned to either the DBT treatment condition (N=13) or treatment as usual condition (N=8) for a period of a year. Outcome measures were performed at baseline, 3, 6, 9 and 12 month intervals, as well as at 3 and 6 month follow up. The measures used to assess eating disorder symptomology included the EDE (Fairburn

& Cooper, 1993), EES (Arnow, Kenardy & Agras, 1995), and EDI (Garner, Olmsted & Polivy, 1983; Garner, 1991). Measures of substance misuse included the Addiction Severity Index, ASI (McLellan, Kusher, Metzger, Peters, Smith, Grisson and Pettinati, 1992) and the Drug Taking Confidence Questionnaire-8 (DTCQ-8; Sklar, Annis & Turner, 1997). Due to a high drop-out rate from the treatment as usual group, insufficient data meant that no meaningful comparison to the DBT group could be made. However, within the DBT treatment group, a significant reduction in binge eating episodes was found where  $\chi^2=8.07$ ,  $p < 0.05$ , which was retained at 3 and 6 month follow up. There was also a main effect of time on the EDI-bulimia scores ( $F(3, 23) = 21.80$ ;  $p < 0.001$ ), ineffectiveness scores ( $F(3, 24) = 12.74$ ;  $p < 0.001$ ) and interoceptive awareness scores ( $F(3, 24)=6.96$ ;  $p<0.002$ ), all of which were retained at follow up. In addition to this, there were significant main effects for time on the EDE- restraint scores, ( $F(3, 18)=8.52$ ;  $p=0.001$ ), eating concern scores ( $F(3, 18)=4.71$ ;  $p < 0.02$ ), shape concern scores ( $F(3, 18)=7.79$ ;  $p < 0.002$ ), weight concern scores ( $F(3, 18)=12.40$ ;  $p < 0.001$ ) and global scores ( $F(3, 18) = 11.62$ ;  $p < 0.001$ ). Significant main effects of time were also found on the ASI substance composite scores where  $F(3, 19) = 2.06$ ;  $p < 0.01$ ), but not on the alcohol composite scores or the DTCQ-8. Despite this, the authors suggest that the results for the use of DBT with co-morbid eating and substance misuse disorders is promising and requires follow up studies to confirm the findings.

#### **1.2.4. Measuring Eating Disorder Symptomolgy**

Several measures, most commonly self-report questionnaires, have been utilised to help determine eating disorder symptomatic change following treatment with DBT. The most frequently identified measures used by the above literature are the Eating

Disorder Examination, EDE (Fairburn and Cooper, 1993), Eating Disorder Inventory, EDI (Garner, Olmsted and Polivy, 1983) and EDI-2 (Garner, 1991) and Emotional Eating Scale, EES (Arnold, Kenardy and Agras, 1995).

The EDE (Fairburn and Cooper, 1993) is a semi-structured interview that is designed to measure eating disorder pathology such as objective and subjective measures of binge-eating frequency, cognitive vulnerabilities to eating disorders and compensatory behaviours over a 28-day period. The EDE is rated via four subscales, as well as a global score, namely: Restraint; Eating concern; Shape concern and Weight concern. It has good inter-rater reliability where Rosen, Vara, Wendt, and Leitenberg (1990) found the coefficients for each subscale to range from 0.83 to 0.99. Cooper, Cooper and Fairburn (1989) described the internal consistency coefficients as: the Restraint Scale = 0.75, the Eating Concern Scale = 0.78, the Weight Concern Scale = 0.67, and the Shape Concern Scale = 0.79.

The EDI (Garner et al. 1983; Garner, 1991) looks at psychological and behavioural traits associated with eating disorders. The EDI comprises of 64 self-report questions, divided into eight subscales. Each question is scored on a Likert 6 point scale ranging from “always” to “never”. The eight subscales are described as follows:

1. Drive for Thinness (EDI-DT), an excessive concern with dieting, preoccupation with weight, and extreme fear of weight gain.
2. Bulimia (EDI-B), episodes of uncontrollable over-eating followed by purging.



3. Body dissatisfaction (EDI-BD), not being satisfied with one's physical appearance e.g. feeling that specific parts of the body are too fat.
4. Ineffectiveness (EDI-IN), assesses feelings of inadequacy, insecurity, worthlessness and not being in control of one's life.
5. Perfectionism (EDI-P), excessively high expectations for achievement, i.e. not being satisfied with anything less than perfect.
6. Interpersonal distrust (EDI-ID), reluctance to form close relationships or feel comfortable expressing emotion towards others.
7. Interoceptive awareness (EDI-IA), the ability to identify sensations and emotions, particularly relating to hunger sensations and satiety.
8. Maturity fears (EDI-MF), wishing to remain in the relative security of pre-adolescent years i.e. not wanting to grow up.

(Summarised from Garner et al.  
1983)

Studies have found that the EDI has good internal consistency ranging from  $r = 0.8 - 0.92$ , and high reliability of the eight sub-scales ranging from 0.82 to 0.93 (Garner et al. 1983; Espelage, Mazzeo, Aggen, Quittner, Sherman and Thompson, 2003).

The EES (Arnow et al. 1995) is a 25 item self-report questionnaire that assesses the degree to which negative emotions lead to urges to eat. Participants are asked to choose from a 5-point Likert scale ranging from "no desire to eat" to "an overwhelming urge to eat" for each item. It has three separate subscales- Anger/Frustration, Anxiety and Depression. It has high internal consistency of 0.81, and temporal stability with a 2 week test re-test of  $r = 0.79$ .

Additional measures have been used to supplement the eating disorder questionnaire findings including the Beck Depression Inventory-II (Beck, Steer and Brown, 1996), Negative Mood Regulation Scale (Cantanzaro and Mearns, 1990) and the Positive and Negative Affect Schedule (Watson, Clark and Tellegen, 1988). An exhaustive list can be found in Appendix 2.

### **1.2.5 Summary and Aims of the Present Review**

A sound theoretical base for the treatment of eating disorders with DBT is emerging in the literature. Although relatively few studies examining the treatment effects have been produced, positive findings are being replicated across studies and therefore a closer look at the efficacy of DBT within eating disorder research is warranted.

In light of the above, the current article will review the literature on the efficacy of dialectical behaviour therapy for the treatment of eating disorders. As each paper utilises several different outcome measures, an overall comparison of treatment efficacy will be found, as well as a selection of further comparisons in order to highlight areas of interest. This literature review will employ the use of meta-analytic procedures, where statistical analysis of a collection of results from each individual study will be combined and integrated to produce an overall finding (Rosenthal, 1995b).

According to Glass (1976), meta-analysis is a way of systematically examining an area of research, whereby statistically combining data and reporting effect sizes helps to formulate and explain areas of interest. A meta-analytic approach helps to

address some of the limitations of each study, particularly as it allows researchers to arrive at conclusions that are suggested to be more credible than can be presented in any one study alone (Rosenthal & DiMatteo, 2001). Meta-analysis also allows for the evaluation of studies with small sample sizes where statistical significance may never be achieved. This is particularly relevant to this review as analysis of uncontrolled studies and case series allows the author to further an area of study which may otherwise be precluded by larger studies (Rosenthal & DiMatteo, 2001).

## **1.3 Method**

### **1.3.1. Search Strategy**

Initially, the Cochrane Database of Systematic Reviews and The Centre for Reviews and Dissemination (DARE) were searched in order to ensure that the current meta-analytic review was an original contribution to the literature. A search of SCOPUS, PsycINFO, Web of Science and Applied Social Sciences Index and Abstracts (ASSIA) was then performed using ‘dialectical behaviour therapy’ or ‘DBT’ combined with ‘bulimia’ or ‘BN’; ‘anorexia’ or ‘AN’; ‘BED’ or ‘binge-eating disorder’ or ‘eating disorder’ as search terms. Initially, all relevant articles found on SCOPUS were saved within a list on the database. All other articles from each database were downloaded to RefWorks in order to check for duplication of results. A master list of relevant papers was compiled which allowed for citation checks. For each newly identified article, the process was repeated. Reference lists from identified book chapters were also reviewed in order to capture any remaining relevant papers. A total of 10 studies met the inclusion criteria. See Figure 1 for a full summary of the search strategy.

### **1.3.2 Criteria for Inclusion**

In order to be included in the meta-analysis, each study was required to meet the following criteria:

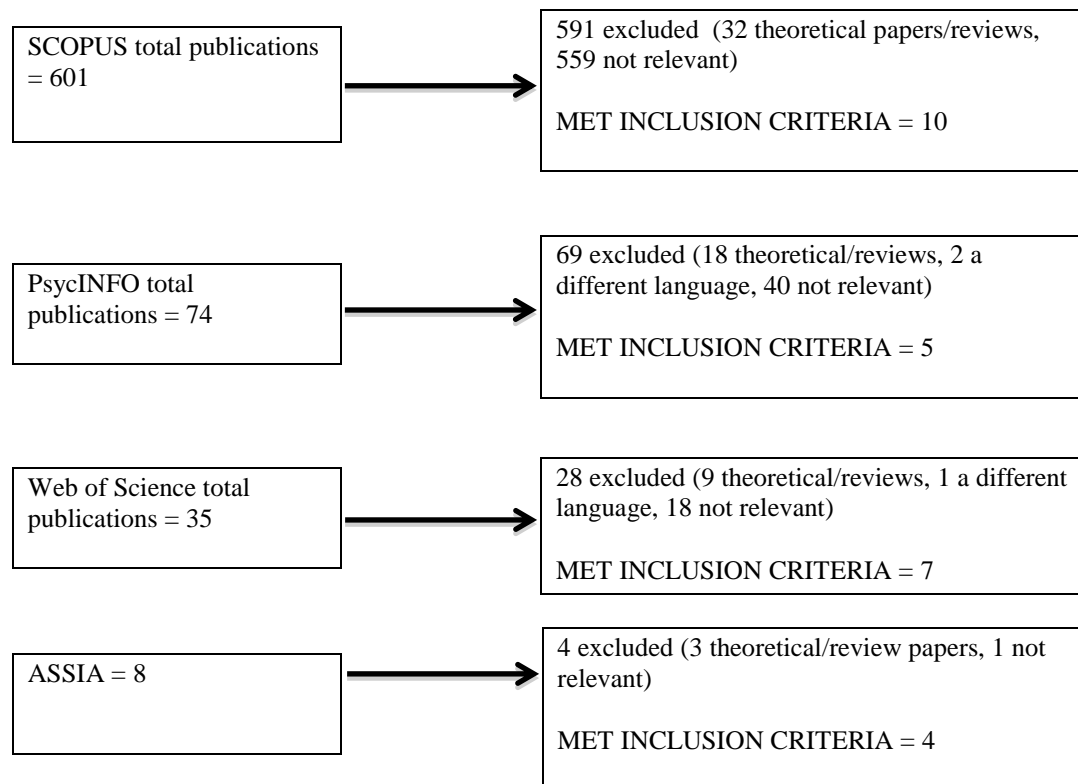
1. The study included an identifiable sample of adolescent or adult individuals with a diagnosed eating disorder of anorexia, bulimia, binge eating disorder or ED-NOS. Due to the limited number of studies, papers were not required to have a control group, although several papers did include one.

2. The dependent variable, dialectical behaviour therapy, was directly measured using a psychometrically valid tool.
3. The mean and standard deviation scores for each individual psychometric were reported in order to calculate an effect size.
4. The sample consisted of either females or males (although very few males were present in the studies).
5. The papers were written in the English language. Whilst two studies were originally conducted in Germany, the measures used were adapted for that population.
6. The studies were published from the year 2000 upwards.

A restriction of year of publication was used primarily to get the most up to date research. However the use of DBT for eating disorders is in fact limited prior to this year. Studies were defined as 'not relevant' if they did not include DBT as the primary treatment variable or focus on participants with a diagnosed eating disorder. In addition to this, each study had to use an original sample population as it was found that several studies used data from previous studies.

**Figure 1 Summary of Search Strategy**

Stage One: Search of electronic databases



Total met inclusion criteria = 26  
Replicated studies = 16  
STUDIES IDENTIFIED = 10

Stage Two: Reference and citation checks

Further studies identified through reference checks = 0  
Further studies identified through citation checks = 0  
TOTAL STUDIES IDENTIFIED = 10

### **1.3.3 Coding Procedure**

Each paper was coded using the following variables: DBT treatment, eating disorder type (anorexia, bulimia, BED or ED-NOS), sample size, psychometric measure used and the corresponding mean and standard deviations. These details were recorded on an Excel spread sheet in order to analyse and produce effect sizes. In addition, it is common for studies to also be rated in terms of quality of design in order to weight effect sizes accordingly (Rosenthal, 1995).

### **1.3.4 Analysis**

The procedures and guidelines of meta-analysis as reported by Rosenthal and DiMatteo (2001) were followed in order to perform the analysis. After the collection of data, including means and standard deviations, a frequency chart of the outcome measures used in each paper was produced. This informed the specific analyses that would be performed as part of the meta-analysis: a comparison of pre vs. post eating disorder symptomology treatment scores across all studies; a comparison of pre vs. post individual eating disorder symptom domains, for example EDI and EES domains; and finally a selection of comparisons of pre and post scores on outcome measures assessing affect, including the Beck Depression Inventory (BDI), Negative Mood Regulation Scale (NMRS) and Positive and Negative Affect Scale (PANAS) and Rosenberg Self Esteem Scale (RSES).

### **1.3.5 Calculation of Effect Sizes (Cohen's *d* and *r*)**

In order to conduct the first stage of the meta-analysis, effect size estimates had to be calculated for each of the studies. An effect size is described as an estimate of the magnitude of the relationship between two variables. They can be grouped

depending on those that measure the magnitude of the difference between groups, termed effect size  $d$  or those that measure the strength of the association between two variables- effect size  $r$  (Rosenthal & DiMatteo, 2001). The most commonly used effect size, which is presented in this study, is Cohen's  $d$ . Cohen's  $d$  is calculated by subtracting the mean of one group from the other ( $M_1 - M_2$ ) and dividing it by the pooled standard deviation ( $SD_{\text{pooled}}$ ). Cohen's  $d$  values are then converted into Pearson's  $r$  correlation coefficients for each study. According to Rosenthal & DiMatteo (2001), calculating effect  $r$ , has several advantages over  $d$ . They suggest that as sample sizes become increasingly unequal, the accuracy of  $d$  will become increasingly underestimated. In addition to this,  $r$  allows for more than two groups to be analysed, whereas  $d$  only allows two, and is believed to be more simply interpreted in practical terms.

### **1.3.6 Combining effect sizes**

In order to find the mean effect size for each analysis, individual effect size  $r$  estimates were combined. Each  $r$  was then transformed into their associated Fisher  $z$  so that the distribution could be normalised. This value was then summed to find the mean Fisher  $z$  and its corresponding  $r$  value.

### **1.3.7 Weighting effect sizes**

Weighting effect sizes is performed in order to improve the quality of the analysis and reduce potential bias in the mean effect size by placing greater weight on studies with larger sample sizes. Therefore each effect size  $r$  included in the analysis was weighted in terms of sample size. This weighted  $r$  was then used to calculate the mean effect size for each study.



### **1.3.8 Determining the level of significance of $r$**

The next stage of the analysis is to determine the significance of each effect size by calculating its standard score termed the  $z$  score. The Stouffer method was employed whereby the standard scores for each study are summed and divided by the square root of the number of comparisons being made, providing a new Stouffer  $z$  for the combined studies.

### **1.3.9 Testing for heterogeneity**

An exploration of the variability between effect sizes was performed for each meta-analysis comparison. This involved calculating the chi-square  $\chi^2$  statistic and its associated statistical significance value  $p$ . If the  $\chi^2$  value is found to be significant ( $p < 0.05$ ), it suggests that the variability between the effect sizes is larger than might be expected by chance. Therefore in order for the findings to be shown as more reliable, a non-significant  $\chi^2$  is preferred.

## 1.4 Results

### 1.4.1 Meta-analysis 1: A Comparison of Pre vs. Post Scores of Binge Eating

#### Episodes

Eight studies were combined on the eating disorder symptomology of binge eating episodes at pre and post treatment in order to assess the efficacy of DBT. Table 1 shows the studies included in the meta-analysis along with their group means and standard deviations (*SD*).

**Table 1. Studies included in the meta-analysis, displaying their group means and standard deviations (*SD*) on the measure of binge eating episodes**

<b>Study</b>	<b>Pre-treatment Score Mean (<i>SD</i>)</b>	<b>Post-treatment Score Mean (<i>SD</i>)</b>
Chen et al. (2008)	16.00 (10.42)	5.25 (10.07)
Courbasson et al. (2011)	22.40 (18.20)	3.3 (5.50)
Hill et al. (2011)	Not reported*	Not reported
Kroeger et al. (2010) AN score	19.22 (17.46)	8.11 (6.33)
Kroeger et al. (2010) BN score	36.87 (9.14)	10.33 (4.43)
Safer et al. (2001)	Not reported*	Not reported
Telch et al. (2000)	15.2 (12.3)	3.2 (7.6)
Telch et al. (2001)	11.5 (10.8)	0 (0)

\* Although effect size *d* is reported within the study, specific values for the mean and *SD* is not reported.

A summary of statistics derived from the eight studies is provided in Table 2, which gives the number of participants (*N*) together with the effect sizes (*d* and *r*) and *z*-scores.

**Table 2. Studies included in the meta-analysis, displaying their sample size (*N*), computed *Z* scores, effect-sizes (*r*) and (*d*), and means.**

Study	<i>N</i>	<i>d</i>	<i>r</i>	<i>z</i>
Chen et al. (2008)	7	1.12	0.219	0.579
Courbasson et al. (2011)	10	1.60	0.286	0.904
Hill et al. (2011)	26	0.84	0.174	0.883
Kroeger et al. (2010) AN score	9	0.90	0.184	0.552
Kroeger et al. (2010) BN score	15	3.83	0.489	1.895
Safer et al. (2001)	14	1.15	0.223	0.835
Telch et al. (2000)	11	1.23	0.235	0.781
Telch et al. (2001)	18	1.55	0.279	1.185
<b>SD</b>		0.97	0.10	0.43
<b>Mean</b>		1.53	0.261	0.952

As can be seen in Table 3, the mean unweighted effect size estimate, *r*, for these studies was 0.26, with a significant corresponding Stouffer *Z* of 2.69 ( $p < .001$ ). Thus, the meta-analysis indicated that participants had significantly fewer binge eating episodes post treatment. However, the chi-square test for homogeneity of effect sizes was significant ( $\chi^2_{(7)} = 9.62, p = 0.01$ ) indicating that the effect sizes for the eight studies *were* significantly different from one another.

**Table 3. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies (*k*), Stouffer *Z*, effect size *r*, and  $\chi^2$  test of homogeneity**

	<i>k</i>	<i>r</i>	Stouffer <i>Z</i>	$\chi^2$
Unweighted	8	0.26	2.69, $p = < .001$	9.62 <sub>(7)</sub> , $p = 0.01$
Weighted	8	1.04	2.43, $p = < .001$	12.93 <sub>(7)</sub> , $p = 0.02$

#### 1.4.2 Meta-analysis 2: A Comparison of Pre vs. Post Scores of Vomiting

##### Episodes

Three studies were identified that compared the number of vomiting episodes pre and post DBT treatment. Table 4 describes the group mean and standard deviation (*SD*) scores of number of vomiting episodes for each study.

**Table 4. Studies included in the meta-analysis, displaying their group means and standard deviations (*SD*) on the measure of vomiting episodes**

<b>Study</b>	<b>Pre-Treatment Score Mean (<i>SD</i>)</b>	<b>Post-Treatment Score Mean (<i>SD</i>)</b>
Salbach-Andrae et al. (2008)	3.7 (0.8)	1.9 (1.3)
Safer et al. (2001)	Not reported	Not reported
Hill et al. (2011)	Not reported	Not reported

Table 5 displays the samples sizes (*N*), *z* scores, effect sizes (*r* and *d*) together with their means and standard deviations.

**Table 5. Studies included in the meta-analysis, displaying their sample size (*N*), computed *z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).**

<b>Study</b>	<b><i>N</i></b>	<b><i>d</i></b>	<b><i>r</i></b>	<b><i>z</i></b>
Salbach-Andrae et al. (2008)	11	1.8	0.310	1.029
Safer et al. (2001)	14	0.61	0.132	0.494
Hill et al. (2011)	26	0.84	0.173	0.883
<b>Mean</b>		1.08	0.21	0.80
<b><i>SD</i></b>		0.63	0.093	0.076

It can be seen in Table 6 that the unweighted effect size for these studies was  $r = 0.21$  with a significant corresponding Stouffer *Z* of 1.39 ( $p < .001$ ). This indicates that the number of vomiting episodes was significantly less at post-treatment. The chi-square test for homogeneity of effect sizes was not significant ( $\chi^2_{(2)} = 1.45$ ,  $p = 0.16$ ) indicating that the effect sizes for the three studies were not significantly different from one another.

**Table 6. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies (*k*), Stouffer *Z*, effect size *r*, and  $\chi^2$  test of homogeneity**

	<b><i>k</i></b>	<b><i>r</i></b>	<b>Stouffer <i>Z</i></b>	<b><math>\chi^2</math></b>
Unweighted	3	0.21	1.39, $p < .001$	1.45 <sub>(2)</sub> , $p = 0.16$
Weighted	3	0.81	1.27, $p < .001$	1.60 <sub>(2)</sub> , $p = 0.20$

### 1.4.3 Meta-analysis 3: A Comparison of Pre vs. Post Scores of the EES Anxiety

#### Domain

The Emotional Eating Scale is broken down into three domains: anxiety, anger and depression. Each domain was compared using three separate meta-analyses, the first being a comparison of pre and post scores of the EES Anxiety. A total of five studies were identified. Table 7 displays the descriptive statistics of each study, including the means and standard deviations (*SD*) for each group on measures of EES Anxiety.

**Table 7. Studies included in the meta-analysis, displaying their group means and standard deviations (*SD*) on the measure of EES Anxiety**

<b>Study</b>	<b>Pre-Treatment Score Mean (<i>SD</i>)</b>	<b>Post-Treatment Score Mean (<i>SD</i>)</b>
Safer et al. (2001)	2.1 (0.8)	1.3 (0.9)
Telch et al. (2000)	1.9 (0.6)	1.5 (0.5)
Telch et al. (2001)	2.3 (0.9)	2.7 (0.6)
Safer et al. (2010)	2.21 (0.86)	1.51 (0.87)
Courbasson et al. (2011)	24 (6.6)	20 (8.2)

Table 8 provides a summary of the statistics derived from the studies, showing the number of participants (*N*) together with the effect sizes (*d* and *r*) and *z*-scores.

**Table 8. Studies included in the meta-analysis, displaying their sample size (*N*), computed *Z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).**

<b>Study</b>	<b><i>N</i></b>	<b><i>d</i></b>	<b><i>r</i></b>	<b><i>z</i></b>
Safer et al. (2001)	14	0.98	0.196	0.734
Telch et al. (2000)	11	0.76	0.160	0.529
Telch et al. (2001)	18	0.92	0.187	0.792
Safer et al. (2010)	50	0.81	0.168	1.190
Courbasson et al. (2011)	10	0.44	0.099	0.312
<b>Mean</b>		0.78	0.162	0.711
<b><i>SD</i></b>		0.21	0.038	0.327

Table 9 shows the unweighted effect size for these studies was  $r = 0.16$ , with a significant corresponding Stouffer  $Z$  of 1.59 ( $p < .001$ ). This indicates that pre-treatment EES Anxiety score was higher than the post-treatment score. The chi-square test for homogeneity of effect sizes was not significant ( $\chi^2_{(4)} = 0.85, p = 0.11$ ) indicating that the effect sizes for the five studies were not significantly different from one another.

**Table 9. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies ( $k$ ), Stouffer  $Z$ , effect size  $r$ , and  $\chi^2$  test of homogeneity**

	$k$	$r$	Stouffer $Z$	$\chi^2$
Unweighted	5	0.16	1.59, $p < .001$	0.85 <sub>(4)</sub> , $p = 0.11$
Weighted	5	0.94	1.59, $p < .001$	7.85 <sub>(4)</sub> , $p = 0.11$

#### 1.4.4 Meta-analysis 4: A Comparison of Pre vs. Post Scores of the EES Anger

##### Domain

Five studies compared pre and post EES Anger scores. A summary of these studies together with the group means and standard deviations ( $SD$ ) on measures of EES Anger is presented in Table 10.

**Table 10. Studies included in the meta-analysis, displaying their group means and standard deviations ( $SD$ ) on the measure EES Anger**

Study	Pre-Treatment Score Mean ( $SD$ )	Post-Treatment Score Mean ( $SD$ )
Safer et al. (2001)	2.7 (0.8)	1.8 (0.8)
Telch et al. (2000)	2.3 (0.7)	1.9 (0.8)
Telch et al. (2001)	2.5 (0.8)	2.8 (0.6)
Safer et al. (2010)	2.57 (0.95)	1.83 (0.98)
Courbasson et al. (2011)	33.9 (9.1)	30.5 (11.7)

A summary of statistics derived from the studies is provided in Table 11, which gives the number of participants ( $N$ ) together with the effect sizes ( $d$  and  $r$ ) and  $z$ -scores.

**Table 11. Studies included in the meta-analysis, displaying their sample size (*N*), computed *z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).**

Study	<i>N</i>	<i>d</i>	<i>r</i>	<i>z</i>
Safer et al. (2001)	14	1.17	0.226	0.845
Telch et al. (2000)	11	0.56	0.122	0.405
Telch et al. (2001)	18	0.8	0.166	0.706
Safer et al. (2010)	50	0.78	0.164	1.156
Courbasson et al. (2011)	10	0.58	0.126	0.399
<b>Mean</b>		0.78	0.161	0.702
<b><i>SD</i></b>		0.25	0.042	0.318

As can be seen in Table 12, the unweighted effect size *r* for the five studies was 0.16, with a significant corresponding Stouffer *Z* of 1.57 ( $p < .001$ ). This indicates that the post treatment EES Anger score was significantly lower than the pre-treatment EES Anger score. A chi-square test for homogeneity of effect sizes was not significant ( $\chi^2_{(4)} = 0.74, p = 0.12$ ) indicating that the effect sizes for the five studies were not significantly different from one another.

**Table 12. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies (*k*), Stouffer *Z*, effect size *r*, and  $\chi^2$  test of homogeneity**

	<i>k</i>	<i>r</i>	Stouffer <i>Z</i>	$\chi^2$
Unweighted	5	0.16	1.57, $p < .001$	0.74 <sub>(4)</sub> $p = 0.12$
Weighted	5	0.91	1.55, $p < .001$	7.38 <sub>(4)</sub> $p = 0.12$

#### 1.4.5 Meta-analysis 5: A Comparison of Pre vs. Post Scores of the EES

##### Depression Domain

Five studies compared pre and post EES Depression scores. A summary of these studies together with the group means and standard deviations (*SD*) on measures of EES Depression is presented in Table 13.

**Table 13. Studies included in the meta-analysis, displaying their group means and standard deviations (*SD*) on the measure EES Depression**

<b>Study</b>	<b>Pre-Treatment Score Mean (<i>SD</i>)</b>	<b>Post-Treatment Score Mean (<i>SD</i>)</b>
Safer et al. (2001)	2.9 (0.7)	2.1 (1.0)
Telch et al. (2000)	2.6 (0.9)	2.3 (0.7)
Telch et al. (2001)	3 (0.7)	2.4 (1.0)
Safer et al. (2010)	2.73 (0.90)	2.06 (0.99)
Courbasson et al. (2011)	18.6 (4.9)	16.0 (6.10)

A summary of statistics derived from the studies is provided in Table 14, which gives the number of participants (*N*) together with the effect sizes (*d* and *r*) and *z*-scores.

**Table 14. Studies included in the meta-analysis, displaying their sample size (*N*), computed *z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).**

<b>Study</b>	<b><i>N</i></b>	<b><i>d</i></b>	<b><i>r</i></b>	<b><i>z</i></b>
Safer et al. (2001)	14	0.96	0.194	0.724
Telch et al. (2000)	11	0.39	0.089	0.294
Telch et al. (2001)	18	0.72	0.153	0.648
Safer et al. (2010)	50	0.72	0.153	1.080
Courbasson et al. (2011)	10	0.84	0.173	0.547
<b>Mean</b>		0.73	0.152	0.659
<b><i>SD</i></b>		0.21	0.039	0.286

Table 15 summarises the results from the meta-analysis. The unweighted effect size *r* for the two studies was 0.15, with a significant corresponding Stouffer *Z* of 1.47 ( $p < .001$ ). This indicates that pre treatment EES Depression score was significantly higher than the post- treatment scores. The chi-square test for homogeneity of effect sizes was not significant ( $\chi^2_{(5)} = 1.49, p = 0.14$ ) indicating that the effect sizes for the five studies were not significantly different from one another.



**Table 15. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies ( $k$ ), Stouffer  $Z$ , effect size  $r$ , and  $\chi^2$  test of homogeneity**

	$k$	$r$	Stouffer $Z$	$\chi^2$
Unweighted	5	0.15	1.47, $p < .001$	1.49 <sub>(5)</sub> , $p = 0.14$
Weighted	5	0.85	1.45, $p < .001$	6.39 <sub>(5)</sub> , $p = 0.15$

#### **1.4.6 Meta-analysis 6: A Comparison of Pre vs. Post Scores of the BDI**

Six studies were identified that compared pre and post BDI scores. Table 16 describes the studies included in the meta-analysis, together with the mean and standard deviation ( $SD$ ) BDI scores.

**Table 16. Studies included in the meta-analysis, displaying their group means and standard deviations ( $SD$ )**

Study	Pre-Treatment Score Mean ( $SD$ )	Post-Treatment Score Mean ( $SD$ )
Safer et al. (2001)	22.9 (8.9)	13.4 (11.6)
Hill et al. (2011)	15.96 (9.04)	7.25 (7.49)
Telch et al. (2000)	11.5 (6.4)	7.0 (5.1)
Telch et al. (2001)	12.8 (7.4)	9.9 (10.0)
Safer et al. (2010)	17.94 (9.37)	9.10 (9.21)
Courbasson et al. (2011)	23.1 (11.10)	16.6 (8.39)

A summary of statistics derived from the studies is provided in Table 17, which gives the number of participants ( $N$ ) together with the effect sizes ( $d$  and  $r$ ) and  $z$ -scores.

**Table 17. Studies included in the meta-analysis, displaying their sample size (*N*), computed *Z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).**

Study	<i>N</i>	<i>d</i>	<i>r</i>	<i>z</i>
Safer et al. (2001)	14	0.95	0.192	0.716
Hill et al. (2011)	26	1.07	0.211	1.074
Telch et al. (2000)	11	0.82	0.170	0.564
Telch et al. (2001)	18	0.34	0.079	0.334
Safer et al. (2010)	50	0.96	0.194	1.368
Courbasson et al. (2011)	10	1.19	0.229	0.723
<b>Mean</b>		0.89	0.179	0.797
<b><i>SD</i></b>		0.30	0.053	0.369

As can be seen in Table 18, the unweighted effect size *r* for these studies was 0.18, with a significant corresponding Stouffer *Z* of 1.95 ( $p < .001$ ). This indicates that the pre-treatment BDI score is significantly higher than the post-treatment score. The chi-square test for homogeneity of effect sizes was significant ( $\chi^2_{(5)} = 4.56, p = 0.05$ ) indicating that the effect sizes for the six studies were in fact significantly different from one another.

**Table 18. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies (*k*), Stouffer *Z*, effect size *r*, and  $\chi^2$  test of homogeneity**

	<i>k</i>	<i>r</i>	Stouffer <i>Z</i>	$\chi^2$
Unweighted	6	0.18	1.95, $p < .001$	4.56 <sub>(5)</sub> , $p = 0.05$
Weighted	6	1.00	1.91, $p < .001$	16.04 <sub>(5)</sub> , $p = 0.06$

#### 1.4.7 Meta-analysis 7: A Comparison of Pre vs. Post Scores on the PANAS

##### Positive Domain

Five studies were identified that compared pre and post PANAS Positive scores. Table 19 describes the studies included in the meta-analysis, together with the mean and standard deviation (*SD*) of PANAS Positive scores.

**Table 19. Studies included in the meta-analysis, displaying their group means and standard deviations (*SD*)**

<b>Study</b>	<b>Pre-Treatment Score Mean (<i>SD</i>)</b>	<b>Pre-Treatment Score Mean (<i>SD</i>)</b>
Safer et al. (2001)	24.8 (8.3)	27.6 (8.2)
Hill et al. (2011)	28.04 (8.25)	34.62 (8.47)
Telch et al. (2000)	25.4 (7.3)	30.8 (7.5)
Telch et al. (2001)	25.8 (7.5)	30.0 (10.8)
Safer et al. (2010)	25.04 (8.35)	30.24 (10.34)

A summary of statistics derived from the studies is provided in Table 20, which gives the number of participants (*N*) together with the effect sizes (*d* and *r*) and *z*-scores.

**Table 20. Studies included in the meta-analysis, displaying their sample size (*N*), computed *Z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).**

<b>Study</b>	<b><i>N</i></b>	<b><i>d</i></b>	<b><i>r</i></b>	<b><i>z</i></b>
Safer et al. (2001)	14	0.35	0.081	0.302
Hill et al. (2011)	26	0.8	0.166	0.848
Telch et al. (2000)	11	0.77	0.162	0.535
Telch et al. (2001)	18	0.47	0.106	0.448
Safer et al. (2010)	50	0.56	0.122	0.865
<b>Mean</b>		0.59	0.127	0.600
<b><i>SD</i></b>		0.19	0.037	0.249

As can be seen in Table 21, the unweighted effect size *r* for these studies was 0.13, with a significant corresponding Stouffer *Z* of 1.34 ( $p < .001$ ). This indicates that the pre-treatment PANAS Positive score is significantly lower than the post-treatment score. The chi-square test for homogeneity of effect size not significant ( $\chi^2_{(4)} = 7.01$ ,  $p = 0.18$ ) indicating that the effect sizes for the five studies were not significantly different from one another.

**Table 21. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies ( $k$ ), Stouffer  $Z$ , effect size  $r$ , and  $\chi^2$  test of homogeneity**

	$k$	$r$	Stouffer $Z$	$\chi^2$
Unweighted	5	0.13	1.34, $p < .001$	7.01 <sub>(4)</sub> , $p = 0.18$
Weighted	5	0.72	1.31, $p < .001$	4.67 <sub>(4)</sub> , $p = 0.18$

#### 1.4.8 Meta-analysis 8: A Comparison of Pre Vs. Post Scores on the PANAS

##### Negative Domain

Five studies were identified that compared pre and post PANAS Negative scores.

Table 22 describes the studies included in the meta-analysis, together with the mean and standard deviation ( $SD$ ) of PANAS Negative scores.

**Table 22. Studies included in the meta-analysis, displaying their group means and standard deviations ( $SD$ )**

Study	Pre-Treatment Score Mean ( $SD$ )	Post-Treatment Score Mean ( $SD$ )
Safer et al. (2001)	31.5 (9.9)	23.4 (8.4)
Hill et al. (2011)	26.55 (7.81)	19.94 (6.11)
Telch et al. (2000)	19.4 (5.5)	18.2 (5.3)
Telch et al. (2001)	23.6 (8.8)	17.9 (6.7)
Safer et al. (2010)	26.08 (9.45)	21.26 (8.01)

A summary of statistics derived from the studies is provided in Table 23, which gives the number of participants ( $N$ ) together with the effect sizes ( $d$  and  $r$ ) and  $z$ -scores.

**Table 23. Studies included in the meta-analysis, displaying their sample size (*N*), computed *Z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).**

Study	<i>N</i>	<i>d</i>	<i>r</i>	<i>z</i>
Safer et al. (2001)	14	0.92	0.187	0.698
Hill et al. (2011)	26	0.96	0.194	0.986
Telch et al. (2000)	11	0.23	0.054	0.178
Telch et al. (2001)	18	0.75	0.158	0.668
Safer et al. (2010)	50	0.56	0.122	0.865
<b>Mean</b>		0.72	0.142	0.679
<b><i>SD</i></b>		0.30	0.057	0.308

As can be seen in Table 24, the unweighted effect size *r* for these studies was 0.14, with a significant corresponding Stouffer *Z* of 1.52 ( $p < .001$ ). This indicates that the pre-treatment PANAS Negative score is significantly higher than the post-treatment score. The chi-square test for homogeneity of effect sizes was significant ( $\chi^2_{(4)} = 3.96, p = 0.13$ ) indicating that the effect sizes for the five studies were in fact significantly different from one another.

**Table 24. Computed results of the meta-analysis, both unweighted and weighted by sample size, including the number of studies (*k*), Stouffer *Z*, effect size *r*, and  $\chi^2$  test of homogeneity**

	<i>k</i>	<i>r</i>	Stouffer <i>Z</i>	$\chi^2$
Unweighted	5	0.14	1.52, $p < .001$	3.96 <sub>(4)</sub> , $p = 0.13$
Weighted	5	0.79	1.47, $p < .001$	4.46 <sub>(5)</sub> , $p = 0.14$

#### 1.4.9 Meta-analysis 9: A Comparison of Individual Domains of the EDI

The final meta-analysis compared results from two studies that measured eating symptomology using the EDI. The EDI has 8 different domains: EDI- Drive for Thinness (EDI-DT), EDI- Bulimia (EDI-B), EDI- Body Dissatisfaction (EDI-BD), EDI- Ineffectiveness (EDI-I), EDI- Perfectionism (EDI-P), EDI- Interpersonal Distrust (EDI-ID), EDI- Interoceptive Awareness (EDI-IA) and EDI- Maturity Fears (EDI-MF). Each domain looks at specific areas that have been identified in the literature as being problematic in an eating disorder client group, and will be looked

at in turn. Due to the large number of domains, a summary of all domains for each study, together with the means and standard deviations for each group are provided in Tables 25 and 26.

**Table 25. Study by Courbasson et al. (2011), displaying the EDI domain group means and standard deviations (*SD*)**

<b>EDI Domain</b>	<b>Pre-Treatment Score Mean (<i>SD</i>)</b>	<b>Post-Treatment Score Mean (<i>SD</i>)</b>
EDI-DT	12.6 (6.50)	10.6 (3.90)
EDI-B	10.1 (6.50)	3.3 (2.90)
EDI-BD	16.6 (8.30)	16.8 (7.60)
EDI-I	11.9 (6.80)	9.9 (7.10)
EDI-P	9.9 (5.90)	9.5 (5.50)
EDI-ID	5.0 (5.40)	5.3 (4.6)
EDI-IA	11.1 (7.50)	7.3 (4.50)
EDI-MF	7.0 (6.00)	3.3 (2.70)

**Table 26. Study by Salbach-Andrae et al. (2008), displaying the EDI domain group means and standard deviations (*SD*)**

<b>EDI Domain</b>	<b>Pre-Treatment Score Mean (<i>SD</i>)</b>	<b>Post-Treatment Score Mean (<i>SD</i>)</b>
EDI-DT	33.6 (8.6)	22.8 (10.1)
EDI-B	32.6 (3.6)	21.7 (7.9)
EDI-BD	40.5 (10.7)	31.7 (12.9)
EDI-I	36.9 (8.6)	29.9 (11.1)
EDI-P	21.6 (8.6)	15.8 (5.3)
EDI-ID	22.6 (6.9)	19.7 (6.0)
EDI-IA	33.6 (11.0)	28.1 (10.9)
EDI-MF	28.6 (7.3)	24.3 (7.3)

Tables 27 and 28 present a summary of each study, including the sample sizes (*N*), *z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*).

**Table 27. Study by Courbasson et al (2011) displaying their sample size (*N*), computed *z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*) for each domain meta-analysis.**

<b>Domain Meta-Analyses</b>	<i>N</i>	<i>d</i>	<i>r</i>	<i>z</i>
EDI-DT <b>Mean (<i>SD</i>)</b>	10	0.53	0.117	0.571
		0.87 (0.48)	0.175 (0.081)	0.571 (0.282)
EDI-B <b>Mean (<i>SD</i>)</b>	10	1.98	0.331	1.046
		1.92 (0.08)	0.324 (0.009)	1.050 (0.004)
EDI-BD <b>Mean (<i>SD</i>)</b>	10	0.14	0.034	0.107
		0.46 (0.45)	0.099 (0.092)	0.324 (0.307)
EDI-I <b>Mean (<i>SD</i>)</b>	10	0.63	0.136	0.430
		0.69 (0.08)	0.146 (0.014)	0.473 (0.060)
EDI-P <b>Mean (<i>SD</i>)</b>	10	0.1	0.024	0.075
		0.48 (0.53)	0.100 (0.107)	0.328 (0.357)
EDI-ID <b>Mean (<i>SD</i>)</b>	10	0.04	0.010	0.031
		0.26 (0.30)	0.058 (0.068)	0.190 (0.225)
EDI-IA <b>Mean (<i>SD</i>)</b>	10	1.21	0.233	0.735
		0.87 (0.48)	0.175 (0.081)	0.562 (0.244)
EDI-MF <b>Mean (<i>SD</i>)</b>	10	0.98	0.196	0.621
		0.8 (0.25)	0.165 (0.044)	0.533 (0.124)

**Table 28. Study by Salbach et al. (2008) displaying their sample size (*N*), computed *z* scores, effect-sizes (*r*) and (*d*), means and standard deviations (*SD*) for each domain meta-analysis.**

<b>Domain Meta-Analyses</b>	<i>N</i>	<i>d</i>	<i>r</i>	<i>z</i>
EDI-DT <b>Mean (<i>SD</i>)</b>	11	1.21	0.233	0.771
		0.87 (0.48)	0.175 (0.081)	0.571 (0.282)
EDI-B <b>Mean (<i>SD</i>)</b>	11	1.86	0.318	1.053
		1.92 (0.08)	0.324 (0.009)	1.050 (0.004)
EDI-BD <b>Mean (<i>SD</i>)</b>	11	0.78	0.164	0.542
		0.46 (0.45)	0.099 (0.092)	0.324 (0.307)
EDI-I <b>Mean (<i>SD</i>)</b>	11	0.74	0.156	0.516
		0.69 (0.08)	0.146 (0.014)	0.473 (0.060)
EDI-P <b>Mean (<i>SD</i>)</b>	11	0.85	0.175	0.580
		0.48 (0.53)	0.100 (0.107)	0.328 (0.357)
EDI-ID <b>Mean (<i>SD</i>)</b>	11	0.47	0.106	0.350
		0.26 (0.30)	0.058 (0.068)	0.190 (0.225)
EDI-IA <b>Mean (<i>SD</i>)</b>	11	0.53	0.117	0.389
		0.87 (0.48)	0.175 (0.081)	0.562 (0.244)
EDI-MF <b>Mean (<i>SD</i>)</b>	11	0.62	0.134	0.445
		0.8 (0.25)	0.165 (0.044)	0.533 (0.124)

The results from the meta-analyses are described in Table 29. The unweighted effect sizes (*r*) and corresponding Stouffer *Z* scores are also provided where it can be seen that for each EDI domain, the post-treatment scores were significantly less than the pre-treatment scores. A chi-square test for homogeneity of effect sizes was performed for each EDI domain, where each was found to be non significant which indicates that the effect sizes for the two studies were not significantly different from one another.



**Table 29. Computed results of the domain meta-analyses, both unweighted and weighted by sample size, including the number of studies ( $k$ ), Stouffer  $Z$ , effect size  $r$ , and  $\chi^2$  test of homogeneity**

<b>Meta-Analysis</b>	<b>Weighting</b>	<b><math>k</math></b>	<b><math>r</math></b>	<b>Stouffer <math>Z</math></b>	<b><math>\chi^2</math></b>
<b>EDI-DT</b>	Unweighted	2	0.18	0.81, $p < .001$	0.14 <sub>(1)</sub> , $p = 0.42$
	Weighted	2	0.58	0.83, $p < .001$	0.60 <sub>(1)</sub> , $p = 0.41$
<b>EDI-B</b>	Unweighted	2	0.32	1.49, $p < .001$	2.18 <sub>(1)</sub> , $p = 0.14$
	Weighted	2	1.05	1.48, $p < .001$	0.00 <sub>(1)</sub> , $p = 0.14$
<b>EDI-BD</b>	Unweighted	2	0.10	0.46, $p < .001$	0.12 <sub>(1)</sub> , $p = 0.65$
	Weighted	2	0.34	0.48, $p < .001$	0.71 <sub>(1)</sub> , $p = 0.63$
<b>EDI-I</b>	Unweighted	2	0.15	0.67, $p < .001$	0.30 <sub>(1)</sub> , $p = 0.50$
	Weighted	2	0.48	0.67, $p < .001$	0.03 <sub>(1)</sub> , $p = 0.50$
<b>EDI-P</b>	Unweighted	2	0.10	0.46, $p < .001$	0.19 <sub>(1)</sub> , $p = 0.64$
	Weighted	2	0.35	0.49, $p < .001$	0.95 <sub>(1)</sub> , $p = 0.63$
<b>EDI-ID</b>	Unweighted	2	0.06	0.27, $p < .001$	0.08 <sub>(1)</sub> , $p = 0.79$
	Weighted	2	0.20	0.28, $p < .001$	0.38 <sub>(1)</sub> , $p = 0.78$
<b>EDI-IA</b>	Unweighted	2	0.18	0.80, $p < .001$	1.71 <sub>(1)</sub> , $p = 0.43$
	Weighted	2	0.55	0.78, $p < .001$	0.45 <sub>(1)</sub> , $p = 0.44$
<b>EDI-MF</b>	Unweighted	2	0.17	0.75, $p < .001$	1.02 <sub>(1)</sub> , $p = 0.45$
	Weighted	2	0.53	0.74, $p < .001$	0.16 <sub>(1)</sub> , $p = 0.46$

## **1.5 Discussion**

### **1.5.1 Summary of Findings**

The results indicate that, on the whole, dialectical behaviour therapy has a positive effect on both eating disorder symptomology and measures of affect, where average effect sizes for each meta-analysis ranged from 0.59 to 1.53 (where an effect size of 0.5 is generally considered moderate and 0.8 is considered large). Unfortunately, due to the measures used, it was not possible to compare all of the ten studies and find an overall effect size of eating disorder symptomology. It was also not possible to look at separate eating disorder diagnoses to determine if this positive effect was comparable across diagnoses. Despite this, with the exception of two analyses, the tests of homogeneity were found to be non-significant which indicates that the present findings are both reliable and consistent. The current findings are therefore suggestive of DBT being an effective treatment for eating disorders.

### **1.5.2 Theoretical and Clinical Implications of the Findings**

The finding that DBT may be an effective treatment for individuals with an eating disorder diagnosis supports the theory, as suggested by Heatherton and Baumeister (1991) and Telch et al. (2000), that an eating disorder may serve to modulate affect, particularly where individuals have difficulty in regulating and managing strong and distressing emotions. DBT is relevant to this observation as it was primarily developed as a framework for addressing this maladaptive way of coping with distressing emotions.

The findings are also important in that co-morbid populations including eating disorder and BPD, and eating disorder and substance misuse, were also included in

the study. Wonderlich and Mitchell (1997) suggest that the prevalence of borderline personality disorder in women being treated for an eating disorder can range from 2% up to 44%. In addition, it is suggested that those who present with both an eating disorder and BPD (ED-BPD) are much more complex and difficult for clinicians to treat (Johnson, Tobin and Enright, 1989). A study by Johnson, Tobin and Dennis (1990) explored the treatment outcome for individuals with a diagnosis of an eating disorder and without a co-morbid diagnosis of BPD. They found that while 90% of their participants who had a diagnosed eating disorder had a reduction of symptoms, only 58% of participants with diagnosis of eating disorder and borderline personality disorder demonstrated a reduction in symptoms. Johnson et al. (1990) also found that ED-BPD participants presented with a more severe level of symptoms at the start of treatment and also remained at clinically significant levels at post-treatment. As this study included several studies that used an ED-BPD population, one might expect there to be fewer significant improvements than was actually found.

Moreover, the findings also potentially extend the current theory proposed by Kroeger et al. (2010), which included individuals with anorexia, a diagnosis that has not been included within the current theoretical perspective. Despite this, Kroeger et al (2010) presented extremely positive findings where, after DBT treatment, anorexic individuals reported significant improvements across outcome measures with effect sizes ranging from 0.63 to 1.47.

The finding that DBT can be used as a viable alternative to other, more widely used, treatments, such as cognitive behavioural therapy and interpersonal therapy, as well as for more clients who present with more complex issues is very encouraging,

particularly where a client fails to respond to such treatments. In addition to this, DBT appears to have a significant effect on not only eating disorder symptomology, but emotional affect too. Meta-analyses addressing the effect of DBT on BDI, RSES and PANAS scores, all showed significant improvements in negative affect symptomology, with average effect sizes ranging from 0.59 to 0.89. The results show that a decrease in depressive and negative affect, as well as an increase in self-esteem and positive affect can be found after DBT treatment. This may have implications as depressive symptomology and low self esteem are found to be mediators in the development and maintenance of eating disorders (Peat and Muehlenkamp, 2011; Wonderlich, Rosenfeldt, Crosby, Mitchell, Engel, Smyth & Miltenberger; 2007). Thereby, a treatment that addresses these constructs may in turn influence improvement in eating difficulties.

### **1.5.3 Limitations of Present Meta-analytic Review**

There are several of limitations of the research included in the meta-analysis that should be considered when interpreting the findings. As DBT for eating disorders is relatively new and under researched subject, the majority of the studies used in this meta-analysis were of case study or uncontrolled design. Therefore the results that were found by these studies are not necessarily definitively attributable to the improvements after DBT treatment. In addition to this, generalisation of the findings is limited due to the small population sizes, as well as the fact that few studies reassessed individuals over a follow up period in order to determine whether treatment effects were maintained. It is good practice to follow up individuals, particularly given the complexity of eating disordered individuals, over at least a 3 to 6 month period. However, researchers must be mindful that should participants go

on to engage in further treatment, any follow up findings may be attributable to these treatments rather than the original intervention.

Another limitation, as highlighted by Kroger et al. (2010), is the effect of malnutrition, particularly for anorexic individuals, on participant ability to accurately use the self-report measures. As Kroger et al. (2010) state, poor malnutrition can have detrimental effects on information processing, which may lead individuals to underestimate their symptomology and affect study findings. However, as this would be the case for all studies, this limitation is likely to be less significant.

A further limitation is that, in comparison to the number of females used in the studies, the numbers of males included were relatively low. In fact, only two of the ten studies included males, albeit a much smaller percentage in comparison to females. Interestingly, Hill et al. (2011) stated that men were excluded from their study due to the “preliminary nature” of exploring DBT, despite evidence to suggest eating disorders in males are on the increase (Hoek, 2006). Whilst eating disorders are more commonly associated with females, it is estimated that approximately 25% of individuals who suffer with an eating disorder are men (Hudson, Hiripi, Pope and Kessler, 2007). This has implications as to whether it would be appropriate to generalise findings to both male and female eating disorder patients.

Finally, a number of the meta-analyses did not have homogeneity of effect sizes suggesting that there was variability of values across studies. For example, the first meta-analysis combined the number of binge eating episodes at pre and post treatment. Included in this meta-analysis was a study by Kroger et al. (2010) who

recruited participants with a co-morbid diagnosis of either anorexia or bulimia with borderline personality disorder. The effect size for improvement of binge eating episodes for bulimic participants was particularly large. It has been suggested by Wonderlich and Swift (1990) that for individuals with bulimia the presence of BPD is associated with a higher severity of symptom pathology; therefore it is possible the effect size reflected a higher level of symptomology of participants in the first instance. It is therefore important to interpret the findings of individual meta-analyses with caution in light of heterogeneity of effect sizes.

#### **1.5.4 Methodological Limitations**

According to Rosenthal and DiMatteo (2001) there are several common criticisms of meta-analyses. Biases in sampling occur due to the inclusion and exclusion of data, particularly where not all target studies are identified or when studies are left unpublished due to non-significant findings (file drawer problem). This review only includes published data. It is therefore possible that studies exist where DBT is shown to be in-effective, and, as a result, unpublished. However, Rosenthal and DiMatteo (2001) suggest that it is possible in a meta-analysis to account for this bias by using the fail-safe  $N$  statistic. This statistic provides information on the number of studies needed to bring a significant overall  $p$  value up to a critical level. For future studies, fail-safe  $N$  will be calculated in order to address the file drawer problem.

A further criticism is that meta-analysis is a method by which studies are combined; it is important to consider that not all studies will operationalise independent and dependent variables in the same way or use the same design. Neither may they

sample from the same population nor use the same outcome measures (Rosenthal & DiMatteo, 2001). Whilst this process can be useful for increasing the generalisability of results when those studies are presented clearly, when ‘good’ and ‘bad’ studies are combined, the overall picture of the data may be distorted. Notwithstanding, these criticisms are less pertinent to the present review due to the fact only the same measures were compared across studies; similar sample populations were used; and the main variability (sample size) is addressed by weighting the studies in terms of sample size.

### **1.5.5 Recommendations for Future Research**

This review has highlighted several areas which may be beneficial to further research to expand the evidence base for DBT for eating disorders. Firstly, at present the literature is constrained by the low numbers of studies evaluating the efficacy and effectiveness of DBT for eating disorders. Moreover, the majority of the evidence is limited to sample populations of bulimia or BED diagnoses. Certainly, in order to generalise DBT to all eating disorder diagnoses, further studies are needed which include participants with a diagnosis of anorexia and/or ED-NOS. It may be useful to begin by limiting the sample populations to individual eating disorders in order to develop the evidence base first, before combining sample populations. In addition to this, the majority of studies utilise a case study design therefore any findings are not necessarily attributable to the treatment provided. Therefore an inclusion of a control group, either treatment as usual or comparative therapy, will allow the treatment findings to become more robust. Future studies may then also utilise a naturalistic design to give an indication of DBT effectiveness within current service provision.

It is also of note that the present review was unable to combine each identified study in terms of the eating disorder outcome measures used. This in turn limited the findings, thereby possibly diluting the results and conclusions drawn. Future studies may consider the eating disorder symptomology outcome measures they adopt, bearing in mind the possibility of further meta-analytic review.

A further recommendation is that it would be beneficial to conduct not only quantitative studies, but also utilise qualitative design methodology. Theory suggests that emotional regulation underpins the eating disorder presentation and therefore addresses this within the DBT treatment. This would be enhanced by participant experience of the DBT treatment and the factors they consider to be important for recovery.

The present meta-analytical review has highlighted DBT as a potentially efficacious treatment for eating disorders. However, it is clear that despite these initial positive findings, further studies are required to increase the evidence base and replicate the results found.



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## **Chapter 2: Empirical Paper**

# **The personal experience of Eating Distress in the context of a history of Trauma: A Phenomenological Analysis**

This paper has been prepared for submission to the International  
Journal of Eating Disorders

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(exclusive of figures, tables, quotes and references)

## **2.1 Abstract**

**Aims:** Quantitative research has suggested a link between a history of trauma experiences and the development of eating distress. However, less is known about the underlying reasons for this, and little qualitative research has been conducted in the area. The current study therefore aims to gain an in-depth understanding of the experiences of trauma and eating distress, using a qualitative approach. The study focused upon the experiences of women, and sought to explore the following research questions: What are women's views on why they have developed eating distress; in what ways do women's eating distress affect their daily life and what have women's experiences of therapeutic interventions been?

**Method:** Semi-structured interviews were carried out with ten women who had been diagnosed with an eating distress, as well as having had a history of trauma. Verbatim transcripts of the interviews were analysed using Interpretative Phenomenological Analysis.

**Results:** The analysis produced five master themes: living with eating distress; silent suffering and being invisible; identity; significant relationships; and the experience of treatment. A description of these master themes and the related subordinate themes is presented.

**Conclusion:** The results of the analysis are considered in light of existing theory and their clinical implications are discussed.

## **2.2 Introduction**

### **2.2.1 Overview**

Eating disorders are complex mental health difficulties associated with both physical and psychological consequences (Kent and Waller, 2000). Eating distress is characterised by a disturbance of eating behaviours and weight control strategies, which can result in a clinically significant impairment of psychosocial functioning, wellbeing and physical health (Fairburn, Cooper & Shafran, 2003). Theories regarding the development of eating distress suggest that there is no single cause; that a combination of factors contribute to the complexity and limited understanding of distress (Fairburn & Harrison, 2003). Therefore, there is a great need for further research into this area (Haynos & Fruzzetti, 2011). This study is particularly interested in the relationship between a history of trauma and the development of eating distress, the evidence for which will be described in detail in the introduction. (For a description of eating disorder diagnostic criteria please see Appendix 3. For estimates of incidence, prevalence and prognosis please see Appendix 4).

### **2.2.2 Traumatic experiences and eating distress**

#### **2.2.2.1 Existing research of the role of traumatic experiences and eating distress**

Research has demonstrated that childhood trauma including emotional, physical, sexual abuse or neglect, has, for some considerable time, been associated with a range of long-term psychological difficulties including depression and anxiety, personality disorders, alcohol and drug abuse and eating disorders (Rorty, Yager & Rossotto, 1994). Most notably, recent research has indicated that traumatic experiences during childhood represent a strong antecedent to developing eating distress, including disorders such as anorexia nervosa (AN), bulimia nervosa (BN)

and binge eating (Rorty & Yager, 1996). A recent quantitative study by Kong & Bernstein (2009) used questionnaire data from 73 males and females with eating distress and found that 90.4% of participants reported a history of traumatic experiences, suggesting a relationship between childhood trauma and the development of eating distress. Similarly, Rodriguez, Perez and Garcia (2005) found 45%-83% of clients with an eating distress reported a history of sexual abuse and/or other forms of abuse and trauma.

Indeed, childhood trauma is seen to be relevant to eating distress; however, it is not uncommon to find a more complex presentation (Briere & Scott, 2007). Patients may report eating distress in the context of distorted cognitions, post-traumatic stress, affect dysregulation and self-injurious behaviours (Briere & Scott, 2007). Briere & Spinazzola (2005) suggest that this symptom pattern is likely to have arisen in the context of early, prolonged and developmentally disruptive traumatic events and is associated with both distress relating to trauma effects and the coping responses to this distress. Cassin & von Ranson (2005) report that the direct effects of long-term abuse may include shame, low self-esteem and distorted body image. The authors postulate that such issues may lead to the need to develop a pleasing image to others, therefore suggesting food restriction is a means of achieving society's perception of a more desirable body weight.

Studies also suggest that different forms of abuse including emotional, sexual or physical, may have a distinct impact on the role within eating distress. Many studies have evidenced a link between eating distress problems and sexual abuse. However, a range of traumatic experiences are associated with the development of eating

distress, including harassment, physical abuse, assault, emotional abuse, emotional and physical neglect, teasing and bullying (Brewerton, 2007). Kent, Waller and Dagnan (1999) found that emotional abuse may play the greatest role in predicting eating distress attitudes from a history of trauma. A non clinical sample of 236 women completed questionnaires on measures of abuse, eating pathology and psychological functioning. They found that when considering all four categories of abuse- physical, emotional, sexual and neglect- emotional abuse was the only category of abuse that predicted unhealthy eating attitudes. However, it is clear from the literature that more work is needed in this subject area before conclusions can be drawn regarding the role different types of traumatic experiences might play in the development of eating distress (Waller, Corstorphine & Mountford 2007).

#### **2.2.2.2 Linking traumatic experiences and eating distress**

Whilst published literature has established a link between childhood trauma and eating distress in women, there is little research examining the underlying relationship between the two presenting problems. There is some evidence to suggest that there are several possible mechanisms, including psychological difficulties such as depression, self image, obsessive-compulsion, self-harming behaviour and impulsivity which mediate the role of trauma in eating distress.

Waller, Corstorphine and Mountford (2007) discussed the links between childhood emotional abuse and the development of eating distress. The authors propose that emotional abuse may result in the development of core beliefs about the self and the acceptability of emotional expression. They suggest that, in order to adapt to emotionally abusive experiences, people utilise dissociation and alexithymic coping

strategies and it is these strategies which predispose the individual to developing eating distress. Dissociation and alexithymia may therefore play a role in mediating the effects of emotional abuse with regards to the development of unhealthy eating behaviours. Dalle Grave, Rigamonti, Todisco and Olisi (1996) also found mediating effects of dissociation as a result of traumatic experiences. Their study suggested that dissociative experiences played a greater influence in the development of eating distress in bulimia and anorexia of the binge-purge type, but not in anorexia restrictive type or binge eating disorder. The authors from these studies suggest that screening for dissociative symptoms in light of a history of trauma may have important implications for those with or developing eating distress.

Gerke, Mazzeo and Kliewer (2006) studied the mediating effects of both dissociation and depression. Looking specifically at the links between childhood trauma and bulimic symptoms they found that depressive symptoms, but not dissociative symptoms mediated the relationship between emotional abuse and bulimic symptomology. Gerke et al. (2006) suggest that when accounting for the mediating effect of depression, dissociation no longer plays a significant role.

Finally, a study by Hund & Espelage (2006) found several mediating factors for the development of eating distress in the context of a history of childhood emotional abuse. They suggest that traumatic experiences in childhood can lead to a disruption of emotional processing and regulation and the identification of emotions. This supports the study by Waller et al. (2007) in proposing that alexithymia plays a mediating role in the development of eating distress. Hund & Espelage (2006) also



found that depression and anxiety are also mediating factors, with strong correlations between depression, anxiety and disordered eating attitudes and behaviours.

Clearly there has been much interest into the role of traumatic experiences into the development of eating distress. However the majority of these studies are quantitative in nature and do not necessarily account for all the experiences that the individual with eating distress feels are relevant.

There has been little research that has adopted a qualitative approach, which taps into the lived and in-depth experiences of clients with a diagnosed eating distress. To date, the author is not aware of any current published research of a similar nature to the current study. Jacobi, Hayward, de Zwaan, Kraemer and Agras (2004) stated that the relationships between risk factors for eating distress are complex and poorly understood as longitudinal, population-based studies are rare and do not generate sufficient numbers for statistical power. They therefore concluded that the current knowledge base on the aetiology of eating distress remains limited. Indeed childhood traumatic experiences may be viewed as having a significant relationship to the development of eating distress. However current research has highlighted that a complex network of factors underlie this relationship. The unique insight that a phenomenological approach may bring to the existing evidence base, may help to produce a richer understanding of the phenomenon of eating distress in individuals with a history of trauma.

### **2.3 Aims and Research Questions**

The aims of the present study are:

1. To explore narratives of the lived experiences of women with eating distress who have both an eating distress diagnosis and a history of trauma.
2. To further understanding of the possible influences of significant life experiences on the lived experiences of women with eating distress difficulties.
3. To explore women's experiences of therapy.

It is hoped that the study will produce rich qualitative information which will add to the existent literature. The research questions proposed are:

- i. What are women's views regarding why they have developed eating distress?
- ii. In what ways does women's eating distress affect their daily life?
- iii. What have women's experiences of therapeutic interventions been?

It is anticipated that the findings will also allow for recommendations in the assessment and treatment of individuals with eating distress difficulties.

## **2.4 Method**

### **2.4.1 Design**

In order to best address the research questions in this study, a qualitative methodology was adopted, namely Interpretative Phenomenological Analysis (IPA). This approach allows for the in-depth and detailed study of the phenomenon that is not easily quantifiable, as is the case in this study. In addition to this, as there is only some existing quantitative, and no qualitative data, as far as the author is aware of, on this study's particular phenomenon, this approach will allow for the emergence of unanticipated findings (Barker, Pistrang & Elliott, 2002). A detailed description of IPA can be found in Appendix 5.

### **2.4.2 Participants**

Research participants were recruited from community mental health teams in the local area, as well as online through BEAT (Beating Eating Disorders), an eating disorder charity. Inclusion and exclusion criteria for those invited to take part in the study is shown in figure 1:

**Inclusion Criteria**

1. Women aged 16 years and over.
2. English speaking.
3. Recognised disorder of AN, BN and ED-NOS.
4. Highlighted as having disclosed a past history of trauma.

**Exclusion Criteria**

1. Women without a DSM-IV recognised eating disorder.
2. First language not English.
3. Participants unable to give informed consent and/or conduct themselves at interview.

**Figure 1: Inclusion and Exclusion criteria.**

Diagnoses were established either by the clinical team, if participants were recruited from the health service or through self-report by the participant if they were recruited through BEAT. For those participants who were recruited through BEAT, they acknowledged these diagnoses were given through previous treatment in the health service or privately. All participants who took part in the study were deemed suitable by both Clinical Supervisors. Ten adult female participants took part in the study. Smith, Flowers and Larkin (2009) suggest that a range of 4 to 10 participants is appropriate for doctoral level research whereby the level of analysis depends on factors such as the richness of individual cases as well as the organisational constraints one is working under.

Table 1, below, provides a summary of the participants who took part. All individuals were given a pseudonym to ensure confidentiality and anonymity. Due to the sensitivity of the research and to respect confidentiality, only age and diagnosis were included:

**Table 1: Pseudonyms and demographics of participants included in the study.**

Pseudonym of Participant	Age (years)	Eating Disorder Diagnosis
Anna	32	Anorexia & ED-NOS
Claire	31	Bulimia
Emma	41	Anorexia
Fiona	25	Anorexia & Bulimia
Helen	40	Anorexia
Jessica	31	Anorexia
Lisa	22	Bulimia
Sarah	40	Bulimia
Rose	35	Anorexia
Poppy	60	Anorexia

#### **2.4.3 Procedure**

When recruiting for the initial stage of the study, all women fitting the criteria of having an eating distress diagnosis with a history of trauma were invited to take part, excluding those outlined above. Participants were recruited either through community mental health teams or by advertisement on the BEAT website. Potential participants contacted the researcher in the first instance at which point information sheets and consent forms were provided. The information sheets included details about the research project, as well as the role and profile of the researcher undertaking the research. Demographic and medical information was obtained for participants detailing age range, ethnic group, Body Mass Index, principal diagnosis, eating distress diagnosis, trauma history, and presence/absence of a self-harm history. This information was obtained by asking the participants to

provide this through self-report prior to commencing the interview. (see Appendix 6 and 7 for Invite Letter and Participant Information Sheet).

Participants were invited to ask questions so that they were fully aware of the purpose of the research and in order that any concerns they had about participating could be addressed. Participants were made aware at each stage that their treatment was not contingent on their participation and that support was available should they find any of the process or topics distressing. Participants were also made aware that they could withdraw from the study at any time. (see Appendix 8 for Consent form).

Once each participant was comfortable with proceedings, the data was obtained through semi-structured interviews. Each interview took approximately 1 to 2 hours and was digitally recorded and transcribed verbatim (see Appendices 9 and 10 for the Interview Schedule and Debriefing Sheet). The results were then analysed using the procedure as described by Willig (2008) and the computer software QSR NVIVO (2011) for the storage and coding of the transcripts. (see Appendices 11 and 12 for the full description and example).

#### **2.4.4 Ethical Considerations**

Ethical issues were addressed in relation to the British Psychological Society Code of Ethics and Conduct (2009). Applications for ethical approval were sent to Coventry University Ethics Committee, the Integrated Research Application System (IRAS), BEAT research recruitment and the relevant Research and Development Departments. Due to the potential for distress of the participants, liaison with case workers and consistent assessment of the participant's emotional state was

maintained throughout the research process. In addition to this, participants were informed at the start of the process, through use of an information sheet, the nature of the research, its aims and purpose. Clients were also given an opportunity to discuss any concerns or questions they may have about the process or the research at an initial meeting. Written consent was obtained from those wishing to participate prior to the interview and also after the interview, when participants are considered to be fully able to give informed consent for their data to be used in the study. Participants were also made aware that they were able to withdraw from the study at any time and also withdraw their consent without it affecting their treatment in any way.

Participants were also informed that, in accordance with the data protection act, all transcripts would be anonymised using a unique number and pseudonym system so that personal details and any identifiable information removed, and all data would be kept secure.

Finally, a protocol for managing emotional distress was developed whereby participants were signposted to support where necessary. Participants were also advised prior to taking part and following completion of the interview that they should seek appropriate support if they feel they need to following participation. (see Appendices 14, 15, 16, 17 and 18 for documentation pertaining to ethical approval).

#### **2.4.5 Position of the researcher**

The Principal researcher of this study was in their final year of a Doctorate Course in Clinical Psychology. Previously the researcher had worked, from a person centred

approach, with women with eating distress during a six-month placement at a community mental health team within the locality of the health service research site, as well as an Assistant Psychologist within adult community mental health. It is from these experiences that the researcher developed an interest in exploring eating distress in women with a traumatic history. It is acknowledged that the researcher's experiences are likely to have influenced the research in relation to the content of the interviews as well as the interpretation of the data. However, the most significant emergent themes were identified and reported, and quotes were selected on the basis of clarity and the best descriptor of the theme. The researcher is mindful that some participants are quoted more than others; however these are not intended to reflect any bias towards certain participants' stories, but rather articulate the essence of the theme. A further exploration of the researcher's reflection on their position can be found at Chapter 3.



## **2.5 Results**

Analysis of the interviews revealed rich data and produced many themes that overlapped and contrasted, allowing for the grouping and re-grouping of subthemes into a meaningful and coherent superordinate theme. It is important to note that whilst participants' accounts of their experiences were similar on many levels, every participant's story was different and narrated a way that was unique to the individual. In addition to this, each individual described differences in terms of their level of recovery and the extent to which they felt they had made links to the origins of their difficulties. Despite this, superordinate themes were identified from the data that reflected the most important themes that emerged during the analysis, as well their relevance to the aims of the paper. Five superordinate themes were identified, a summary of which is described in Table 2. These will be described in more detail below. An exhaustive list of the themes found after the analysis can be found in Appendix 13.

**Table 2. Summary of Superordinate and Subordinate Themes**

<b>Superordinate Themes</b>	<b>Subordinate Themes</b>
<b>2.5.1 Living with eating distress</b>	2.5.1.1 Eating behaviours and fear of food 2.5.1.2 The impact of eating distress on health 2.5.1.3 Secrets and lies 2.5.1.4 The road of relapse and recovery
<b>2.5.2 Silent suffering and being invisible</b>	2.5.2.1 Nobody recognising abuse going on 2.5.2.2 Invisible eating distress 2.5.2.3 “I just wanted people to notice me” 2.5.2.4 Low mood and depression
<b>2.5.3 Identity</b>	2.5.3.1 Low self worth 2.5.3.2 Eating distress and self esteem 2.5.3.3 Strategies employed to manage self 2.5.3.4 Self harm and dissociation 2.5.3.5 Fragile sense of self
<b>2.5.4 Significant relationships</b>	2.5.4.1 Relationship with parents 2.5.4.2 Relationship with others 2.5.4.3 Relationship with the world 2.5.4.4 Relationship with food 2.5.4.5 Helping others- “there must be purpose in this pain”
<b>2.5.5 The experience of treatment</b>	2.5.5.1 Contact with professionals 2.5.5.2 Re-traumatising treatment 2.5.5.3 Feelings of not being deserving 2.5.5.4 Giving people a choice for recovery

### **2.5.1 Living with Eating Distress**

#### **2.5.1.1 Eating behaviours and fear of food**

Depending on their diagnosis and stage of recovery, participants described their relationship with food and the behaviours they adopted as a result of their eating

difficulties. Fiona described the conflict and indecision she faced daily when deciding what to eat:

“I find it really difficult to make decisions about food...I can’t cook for myself, I can’t decide, like I’m coming home from work and I’m going to cook such and such, I can’t do that at all.” (Fiona, P1, L 3-5)

Fiona went on to talk about the “*panic about either something like the calorific value of it or not knowing what portion size I should be having*” showing her preoccupation of whether the food she eats would lead to purging and the worry of putting on weight. This is reflected in Emma’s observation that she could not adapt to a normal diet due to impact it might have on her current weight:

“I am still terrified of food...I still have this fear if I were to eat a normal diet, I would continue to gain weight above this weight.”  
(Emma, P2, L 40-41)

Jessica acknowledged that despite feeling quite far down the road of recovery “*the thoughts (about food) never completely go*” where she felt that she could not listen to the cues of her body signalling she was hungry or satiated:

“There is still this kind of, um, ‘how much should I eat and how much should I allow myself to eat?’...even though I enjoy the food it is never a spontaneous thing that I can eat whenever I’m hungry, that just doesn’t work.” (Jessica, P1, L16-18)

### **2.5.1.2 The impact of eating distress on health**

All participants described some form of physical health complaint as a result of their eating distress difficulties. Claire reported she had been “*hospitalised a lot for low potassium and dehydration*”, the effects of which for Lisa were that it “*caused my hair to fall out*”. Whilst these complications appeared to have little impact on their day-to-day functioning, in the long-term, serious complications sometimes occurred as Claire explained:

“The last couple of years have got a lot worse. I have a hernia, caused by purging, that caused bleeding in the stomach and I had to have transfusions for that as well.” (Claire, L1, P16-18)

Notably, this was echoed by Emma when she described being diagnosed with Fibromyalgia, something she attributed to her eating distress. Despite her eating distress affecting her physical health and recovery, Emma lamented the underlying feeling that drives it remains:

“I really am just left with a limited quality of life...I almost feel like I am paying the price for so many years of starving myself because actually it has taken its toll on my body...but, it is still the same things that have always existed like feeling I am fat”. (Emma, P1, L 18-22)

### 2.5.1.3 Secrets and lies

“I could make it look like I was eating and I could sometimes actually prepare food and then get bits of it and put it in bags and put it in the bin, so it looked like I had eaten because there was a plate there with some food left on it”. (Lisa, P3, L 96-99)

Secrecy and deception was a common theme amongst several of the participants. They described that hiding the fact they had eating distress from family, friends and loved ones made it easier to engage in eating behaviours without reproach or experiencing embarrassment or shame. Rose spoke of hiding her eating distress from her husband:

“I became really secretive and my husband didn’t even know I was ill until two weeks before I went into hospital”. (Rose, P2, L67-68)

Sarah effectively managed to hide her bulimia from her husband for a year until “*one day he came back early and literally caught me in the middle of pizza boxes and cakes and he was like 'what the hell are you doing'*”. Sarah stated that her husband then encouraged her to seek professional help sooner than she was comfortable with. Not being ready for treatment or being made to engage in treatment against their will often fuelled the drive to lie and manipulate a situation. Emma described:

“One day they came in and said “we need to weigh you”, and I had been water-logging and had weights in my pyjamas and all sorts

and they found out I was about stone lighter than they thought”.

(Emma, P4/5, L 147-150)

#### **2.5.1.4 The road of relapse and recovery**

Each participant was at a different stage in their recovery and so their experiences varied in this respect. Self criticism and negative feelings of self- worth appeared to affect participants at different stages, but the realisation that recovery was not a straightforward process was recognised by all:

“When I started enjoying food again, if I did not do something well I would punish myself by not allowing myself particular a particular food I enjoyed...”(Jessica, P10, L 333-335)

“Recovery is an ongoing process. It's the only thing that can't be weighed and measured. It's two steps forward and three steps backwards and everyone's journey is very individual”.(Poppy, P10, L 353-356)

#### **2.5.2 Silent suffering and being invisible**

##### **2.5.2.1 Nobody recognising abuse going on**

Several of the participants suffered either sexual or emotional abuse by family members or friends. A common theme emerged of a sense of feeling invisible and having to manage their distress on their own. Emma described how she used her body as a canvas for the abuse she was suffering, but with no acknowledgement from those that were supposed to look after her:

“The more they didn’t see me or what was happening to me, the more I acted it out on my body...until they put me in isolation as the other patients found me quite disturbing”.(Emma, P6, L 185-188)

Emma suggested that her pain and suffering had to be hidden as it was too difficult for others to manage. This was echoed in Sarah’s account where she described the aftermath of a rape she suffered when she was 16:

“It (the rape) wasn't really dealt with, I wasn't given counselling and it was brushed under the carpet”. (Sarah, P3, L 108-109)

#### **2.5.2.2 Invisible eating distress**

“I started to self harm and I overdosed, but for whatever reason things were not addressed or looked upon and I certainly wasn’t a person in my own right able to say, “I need some help here”. Things for many reasons were brushed under the carpet”. (Helen, P3, L 79-82)

Suffering in silence, not only through abuse, but also through eating distress was also a common occurrence. A lack of voice and low self esteem led Helen to feel that she was not worthy of being helped, especially as her cries for help were often “*brushed under the carpet*”. Claire described how her parents still did not recognise the extent of her difficulties or make attempts to support her recovery:

“My parents are just happy when I have lost weight, they don’t see any problems with my eating. The only time they ever noticed was when I was hospitalised for it...but even then it wasn’t addressed”.

(Claire, P4, L 144-147)

### **2.5.2.3 “*I just wanted people to notice me*”**

The desire to be noticed and validated emerged throughout many of the accounts. Sarah described her parents as not being good at praising her or giving her attention, as did Helen, Claire and Rose. Sarah observed that:

“People with anorexia or any form of eating disorder struggle with knowing how to express themselves...and probably having grown up in a pretty invalidating environment, feelings weren’t acceptable so you had to hide them”. (Sarah, P4, L 113-115)

This reflects the effects of a child growing up and feeling neglected and ignored by their parents. Emma described how her parents continue to ignore the symptoms of her distress, even as an adult:

“My mum and dad would sit in the same room as me having a seizure and carry on doing the normal thing and pretend I was asleep...they are quite disconnected”. (Emma, P9, L 318-320)



#### **2.5.2.4 Low Mood and Depression**

Participants in the research described how battling with low mood and depression reflected the complexity of the difficulties they faced. Almost all participants noted the effects of low mood. Lisa acknowledged that her low mood was also instrumental in maintaining the self-harm and attempt on her life:

“I was really low. I overdosed and tried to kill myself. I used to cut all the time, I just hated myself and I did not want to be here”. (Lisa, P7, L 228-229)

Helen remarked that, at the same time, her eating distress maintained her low mood:

“Something switches in the brain at that point and you become very withdrawn and depressed and physically cold all of the time. You’re living on bizarre diets and limiting yourself to a carrot a day and you become crazy as hell”. (Helen, P9, L 321-324)

### **2.5.3 Identity**

#### **2.5.3.1 Low self worth**

“You put all your feelings into your body...although feelings of worthlessness and low self esteem you put into reducing yourself and you do this hoping that you are going to feel worth something, even though you keep taking more of yourself away. What it actually does

is communicate to everyone else how crap you feel about yourself”(Emma, P7, L 231-235)

Emma reflected how her eating distress was a way of attempting to erode her feelings of low self-worth so that they no longer existed and she would then feel like a worthwhile person. However as she points out, instead of being left with self-worth, she had simply communicated to others that she is not worth counting. Feeling negative towards oneself was common throughout the interviews as Anna also described:

“There is not much I would use to describe myself, but I really dislike the way I look. I feel a complete failure at the moment...I don’t feel anything positive about me at all”. (Anna, P14, L 510-512)

#### **2.5.3.2 Eating distress and self esteem**

Participants felt that their eating distress was one way of helping to boost their self esteem. Jessica felt that her eating distress gave her an attribute that others were not able to match:

“One thing was that I thought it was something I was good at, it was something others found difficult, losing weight, but I didn’t find it difficult”. (Jessica, P6, L 178-180)

For participants interviewed it appeared to boost the way they felt about themselves in a positive way, which is reflected in Helen's observation that:

“The most powerful thing about an eating disorder is that you feel better, much better if you deny yourself that (food) and you are at a lower weight. There is something very powerful bout that”. (Helen, lines, P9, L 301-303)

### **2.5.3.3 Strategies employed to manage ‘self’**

Using their eating distress as a way of managing strong and negative emotions emerged throughout all the participant accounts. Fiona was able to describe how she used her eating distress and self-harm to manage feelings of sadness, rejection and failure:

“If somebody says something that upsets me and makes me feel sad, then I am more likely not to eat. Whereas if I feel disappointed in myself then that is when I will be sick”. (Fiona, P9, L 319-321)

### **2.5.3.4 Self-harm and Dissociation**

In addition to using their eating difficulties to manage their emotions, self-harm also played a powerful role in alleviating distress:

“...I had this compulsion to attack and injure myself, I think it must have been anger or something...I got some scissors from my drawer and I just stabbed my arm...I recollect in that time it gave me a sense

of relief that I had never ever experienced and it became very powerful”(Helen, P3, L 109-116)

It emerged that the function of combining eating distress and self-harm was to not only address strong negative emotion, but to disconnect from them completely:

“...I mean I was completely numb. I felt that nobody could hurt me, but I couldn’t feel happy either. It was just I can exist and whatever happens doesn’t really matter...it was a way of switching off the pain...” (Anna, P15, L 521-524)

#### **2.5.3.5 Fragile sense of ‘self’**

Being able to shape a positive identity, that was not reliant on their eating distress, emerged throughout several interviews. Fiona struggled to describe herself in terms other than her eating distress. She felt it was the only positive defining aspect of her identity; perhaps making her feel special:

“It (eating disorder) gives me an identity I think...on a normal day of eating I don’t think I am any different to anybody, there is nothing that would distinguish me from others...that is my self esteem because I am still under that label” (Fiona, P2, L 45-48)

In a more extreme form, Emma stated that her identity had started to merge with that of her abuser. She recognised that she had assimilated the descriptions her abuser had called her into her own sense of self:

“I used to call myself the beast, I would say things like ‘I’m off to punish the beast’...What I had done was I had taken the words my abuser had said to me and was calling myself those things as I really thought I was evil, a monster...” (Emma, P5, L 177-183)

Jessica, however, demonstrated how insight into her eating distress enabled her to free herself from the association of controlling her weight and her sense of self:

“As soon as I realised that actually, my food intake has nothing to do with how well I do in other areas of my life, I could feel better about myself and take pride in the fact that I could see that starving myself isn’t actually a talent, it doesn’t define me” (Jessica, P2, L 320-323)

## **2.5.4 Significant relationships**

### **2.5.4.1 Relationship with parents**

Feeling neglected and criticised by their parents was a theme that emerged throughout the interviews and analysis. For Jessica, not only did she feel vulnerable and unsafe, but she was further rejected by her mother through criticism and blame:

“...well obviously I felt unprotected because she wasn’t there when the abuse happened, but also I could not do anything right. Whatever I did made her angry...” (Jessica, P7, L 244-246)

Having no parental support at all was described by Claire, Anna and Emma. Feelings of guilt and perhaps an inability to manage their own distress prompted further rejection of an acknowledgement of the difficulties participants faced. This was reflected in Emma's account after she disclosed the abuse she had suffered throughout childhood:

“...they found it just too hard, they literally cut off. My dad literally left in the middle of the meeting and said ‘I’m sorry, but I need to go to the pub. I can’t handle this’. And he has never mentioned it since...” (Emma, P8, L 288-290)

Emma's father's reaction worked to compound her existing feelings of being invisible and ignored, as well as invalidating her traumatic experiences.

#### **2.5.4.2 Relationship with others**

Lisa described her belief that her eating distress improved the relationships she had with others, such as with peers, at work and school. Lisa felt that her low weight would somehow make her more attractive as a friend and feel accepted by others:

“I don’t know...it’s like I want to be thinner to be more accepted. I feel like if I am thinner then I will be better looking and be more confident” (Lisa, P12, L 403-404)

The downside of this however was revealed by Emma:

“...if I reduced my needs, if I reduced my voice that I would somehow be accepted and it doesn’t come...I have literally reduced myself to nothing and that there was no way I was going to be accepted or to find my voice and make myself visible” (Emma, P7, L 241-245)

Emma’s insight, after suffering anorexia for nearly thirty years, was that no matter what weight she was, the feelings of being accepted and valued by others never materialised.

#### **2.5.4.3 Relationship with the world**

An unsafe, unprotected and unstable environment growing up was frequently described by a number of participants. Feeling out of control and not being able to address what was happening appears to have been a precipitating factor to the participants interviewed in developing eating distress:

“It gave me the feeling that I am in control of something in my life...it was quite hard growing up on my own so I thought ‘everything else if falling apart’, it gave me some kind of control...eating less just seems to give me some kind of control...” (Jessica, P1, L 6-11)

Having a sense of control over what was happening appeared to be important in managing distress. When this control was taken away from Poppy, particularly during treatment, this led to her disengaging and feeling unsafe:

“...I was hospitalised and I stayed for six months. It didn’t really help me because I thought I was forced to do that, I wasn’t ready to make that change. I was forced to gain weight, I was force fed and this was taking away my control” (Poppy, P9, L 306-310)

#### **2.5.4.4 Relationship with food**

Many participants described the effect of their eating distress on close relationships that they had and their ability to develop new ones. Rose described her eating distress as taking over her life and occupying her thoughts almost all of the time, and as she felt, at the expense of her family:

“I mean it sounds terrible, but I didn’t even have time for my son, the most important relationship in my life was with food...I didn’t have time for anyone else...” (Rose, P4, L 133-135)

In contrast, Helen described the relationship she had with food as being the one she could turn to and rely on whenever she felt unable to relate to others:

“I suppose my relationship comes with my eating disorder, that’s the only positive relationship, ironically, that I developed...it’s probably the one I feel most confident with” (Helen, P5, L 166-169)



#### **2.5.4.5 Helping others- *“There must be some purpose in this pain”***

A strong theme emerged of participants wanting to use their experiences to help others with similar difficulties. As Rose described, she feels that her experiences cannot be in vain; that her insights can be used to support others:

“I really want to do something to make a difference, however small it is because I see such a big need for it. I think if I can somehow turn this nightmare experience into something positive then that gives me a reason to go on...” (Rose, P11, L 397-400)

Participants also described using their experiences as a foundation for seeking education and future employment in services to support individuals through difficult life experiences.

“There is a counselling course that I have applied for, and I do feel that I am at a stage where I have come to terms with what has happened to me...I can somehow move forward in a way and take my experiences and help others at some point” (Jessica, P9, L 297-301)

### **2.5.5 Experience of treatment**

#### **2.5.5.1 Contact with professionals**

Many of the participants’ experiences consisted of both positive and negative treatment. Emma felt that her contact with professionals was particularly bad at times, where she narrated her perception that some professionals lack the skills and training needed to effectively treat her:

“A lot of the nursing staff that are on those programmes don’t even have any specialist training. They say things like ‘we thought it was an interesting subject’. And it is an interesting subject, but people aren’t guinea pigs...these people really need training” (Emma, P13/14, L 477-481)

Emma also felt that some of the bad treatment she had received reinforced the idea that people who have eating distress problems are invisible and not worth treating. When professionals attempted to inappropriately address Emma’s experiences of trauma, she suffered a breakdown. As a result, she described her care team as deciding to avoid addressing these issues at all, actively preventing her from disclosing:

“...well what actually happened after the breakdown was they said ‘whatever you do don’t talk about the abuse because it gave you a breakdown...So they went from lets expose the abuse, to then, well actually she has gone crackers so let’s not talk about it” (Emma, P5, L 157-160)

An open and non-judgemental approach from professionals was viewed as valuable by all participants where the focus was not on food or weight. Focussing on food and weight directly was felt to be detrimental to the therapeutic relationship and participants described professionals ‘not seeing the person for the eating disorder’:

“...my therapist was amazing. She was always supportive and she gave me good advice...she hardly talked about food which was the main thing...that was really important” (Lisa, P12, L 416-422)

#### **2.5.5.2 Re-traumatising treatment**

The experiences of treatment, particularly of those who restricted their eating or were anorexic, were often perceived as cruel and offensive. For several participants, their experiences of abuse were re-lived through the procedures they were subjected to. Emma described the re-feeding treatment she experienced as reminding her of her sexual abuse experiences, when she was held down and forced to do something she did not want to do:

“I suppose, the way services would respond at that time would be, well, we will detain you and force feed you, but force feeding felt intrusive and abusive and I felt I was being forced to do something against my will all over again” (Emma, P4, L 135-138)

Having to recount and go through traumatic life experiences may be part of the treatment an individual is offered. Rose described how she had started addressing her past experiences with her therapist, but that this was cut short by the service without consideration of the effects on her wellbeing:

“She said we’re going to talk about past stuff, which was ok, but then because of funding they said we’re going to discharge you...and I fell apart then...since we’ve started doing this work and it feels really

wrong now to just, it's almost reinforcing that don't talk about it, it's wrong to talk about it, stop speaking..." (Rose, P5, L 164-169)

Rose's experience echoed the theme of being ignored and invisible, as well as undermining the trust and relationship she had developed with her therapist.

### **2.5.5.3 Feelings of not being deserving**

It was felt by several participants that a lack of appropriate treatment facilities has led to strict criteria being implemented in order to direct treatment towards individuals most at risk from their eating distress those most in need. Sarah remarked that:

"...there is less treatment, less outpatient and inpatient services and people are being allowed to walk around with BMIs of 10 or 11 and being told they don't think they're sick enough to deserve treatment...my BMI is not low enough to deserve treatment..." (Sarah, P12, L 441-444)

This had led participants with eating distress problems to feel rejected and not good enough to deserve treatment. Not feeling important enough was also echoed in Lisa's story as her age meant that she fell between services, and neither agreed to help her:

"...it felt like I wasn't important enough, it kind of knocked me a lot because it was the first time I had ever asked for help...I felt quite rejected and upset about that..."- (Lisa, P12, L 431-433)

#### **2.5.5.4 Giving people a choice for recovery**

The gold standard of treatment for individuals with eating distress and past history of trauma, as perceived by Emma is described below:

“...the only way people will get through this is by telling them what anorexia is actually about, by people communicating their feelings through their body, and that they don’t have a vocabulary for their feelings. If you give them this vocabulary they have more choices...they are not necessarily going to choose to stay in the same situation. Not that they see another option sometimes, but people don’t choose to be in that much pain” (Emma, P15, L 535-540)

Emma’s recognition reflected participants’ views that individuals with eating distress should be given the education and insight in order to make a choice about their treatment. She proposed that in her view, if individuals were given the appropriate skills to manage their emotions and distress, other than having to rely on their eating behaviours, people may choose the former. However, several participants described that a lack of funding and treatment programmes greatly reduced the choices they had for treatment.

## **2.5 Discussion**

The present research focused on the lived experiences of women with eating distress who also have a history of trauma, which to the author's knowledge, has not been extensively researched. The findings provided a detailed, and at times moving, account of women's experiences of eating distress and trauma and how these impacted on their daily lives, relationship with themselves and others, as well as their treatment experiences. This section will now consider the results of the research in relation to the existing clinical and theoretical literature.

### **2.5.1 Findings in relation to existent literature**

Briere and Scott (2007) highlighted that clients often reported eating distress in the context of distorted cognitions, post-traumatic stress, affect dysregulation and self-injurious behaviours. The current findings are consistent with this observation where themes of emotional dysregulation, self harm, and distorted sense of self were all described by the participants interviewed. Briere & Spinazzola (2005) suggested that these symptoms were likely to have arisen in the context of early, prolonged and developmentally disruptive traumatic events and were associated with both direct trauma effects and the coping responses to this distress. Participants in this study reported that their adverse life events played a role in the development of their eating distress, with links to the theme of invalidating environments growing up. Wanting to be accepted and have their existence and experiences validated by parents, friends and professionals was commonly reported throughout the participants' accounts. Hund & Espelage (2006) suggested that traumatic experiences in childhood can lead to a disruption of emotional processing and regulation and the identification of emotions. This was echoed through several of the participants' interviews,

particularly by Emma, who felt that her eating distress worked to starve her of her emotions. Haynos and Fruzzetti (2011) proposed a transactional model of emotion regulation where eating distress behaviour, such as restricting, bingeing and purging, regulate emotions through escape. The authors suggested that engaging in such activities provides relief from distressing emotional arousal in the short-term, but reinforces their use in the long term. It is possible that emotional dysregulation may act as a mediator between a history of trauma and the development of eating distress (Haynos & Fruzzetti, 2011). Certainly the participants' accounts of managing emotions reflected a difficulty to manage distress and strong emotions. This finding contrasts with the suggestion made by Fairburn, Cooper and Shafran (2003) that individuals, particularly with anorexia, rarely experience problems with regulating affect.

Emotional dysregulation has links to dissociation and self harm, a further important theme that emerged from the study. Kent, Waller and Dagnan (1999) suggested that in order to adapt to emotionally abusive experiences, people use dissociation and alexithymic coping strategies and these strategies predispose the individual to developing eating distress. Dissociation did indeed play a role in managing strong negative emotion for the participants, but also in disconnecting from them completely. This is consistent with participants' accounts of using both eating behaviours and self harm to disconnect from intense emotional pain. Dalle Grave et al. (1996) found that dissociative experiences influence the development of eating disorders in bulimia and anorexia of the binge-purge type, but not in anorexia restrictive type or binge eating disorder. This is in contrast to the participants' experiences in the current study, as several of those who engaged in restrictive eating

behaviours noted the effect starvation had on the ability to feel connected to their body.

A further theme of using eating behaviours as a way of promoting acceptance from others emerged from analysis of the narratives. Haynos and Fruzzetti (2011) postulate that the promotion of 'being thin' by the media and society gives the message that personal value is inversely related to weight. This is consistent with the view by many of the participants who felt that the only way to be accepted by others was to lose weight and be seen as 'thin'. Indeed, this belief was reinforced by the attention that was often given by friends and family thereby encouraging the behaviour. The author acknowledges that this is a further invalidating environment where a normal and healthy range of body shapes is discouraged, affecting a person's ability to experience and respond to hunger and satiety.

Eating behaviours were also seen as strategies of improving self-esteem and managing a fragile sense of self. Several participants noted the effect of controlling one's food and calorie intake, in light of their world feeling out of control. It is possible that attempts of regaining control are reflective of an inner strength, despite perhaps experiencing feelings of low self worth. It is important to consider that individuals with eating distress and a history of traumatic experiences are often surviving and strong, displaying mechanisms for survival, albeit unhelpful strategies, for managing overwhelming distress and protecting against feelings of low self worth. For example, Arkell and Robinson (2008) suggest that eating behaviours can promote feelings of pride, confidence and achievement, particularly in light of being unable to identify any other positive attributes. Indeed many of the participants



struggled to identify that their food intake had nothing to do with how much they achieved and that restricting their eating was not a talent- as echoed in Jessica's story.

### **2.5.2 Methodological Limitations**

The nature of IPA is such that it requires a degree of subjectivity by the researcher, therefore reliability and validity of qualitative research can be called into question (Smith et al. 2009). The aim of the study was to explore the lived experiences of participants who had eating distress difficulties and a history of traumatic difficulties. Due to the sensitive nature of the study, it was important to allow participants to make their own judgements as to the degree their traumatic early experiences may have impacted on the development of their eating distress, and these judgements do not necessarily corroborate the existing literature.

A further criticism of qualitative research, again pertaining to subjectivity, is the bias produced by a relatively small sample size, as well as by the researcher themselves. In keeping with recommendations by Smith and colleagues (2009), a purposeful and homogenous sample was used for this study. The goal of purposive sampling is not to *randomly* select units from a *population* to create a *sample* with the intention of making *generalisations* from that sample to the population of interest. Rather, the main goal of purposive sampling in IPA is to focus on particular characteristics of a population that are of interest, which will best enable the researcher to answer the research questions. The sample being studied is not representative of the population, but selected on the basis of having similar characteristics, in this case eating distress and a history of trauma. Therefore the author notes that the results from this study

cannot be generalised to the wider population of women with eating distress. In addition to this, the researcher's position and how their own experiences, of working with women with eating distress and a history of traumatic experiences, may impact on analysis and theme generation must also be considered. The researcher's interpretation of the data provides only one interpretation and this is likely to be different to other researchers with their own experiences. However, in order to go some way to addressing subjectivity when analysing the data, other researchers were involved in checking the transcripts for agreement in coding, thus minimising potential bias (Willig, 2008).

### **2.5.3 Clinical Implications**

Findings from this study have clear clinical relevance, particularly when considering recovery for individuals with eating distress. The findings suggest that emotional intolerance and dysregulation plays a role in the development and maintenance of eating distress. Many of the participants experienced trauma within invalidating environments, where they felt invisible and ignored by those who were in positions to take care of and protect them. It is suggested that these environments can lead to the disruption of emotional processing and regulation and the identification of emotions (Hund & Espelgae, 2006). Therefore, when an individual with eating distress experiences distressing emotions, and without access to appropriate self soothing strategies, eating distress behaviours may act a method to regulate or rid the individual of these painful emotions (Haynos & Fruzzetti, 2011). Therefore it is important for clinicians to consider this, particularly when working collaboratively with their clients, to look at the ways the client manages distress and overwhelming emotions.

As expressed by Emma throughout her interview, it is important for an individual to be of an appropriate weight that allows for emotional recognition and processing, in order for therapy to be of benefit. Emma suggested that when she was of extremely low weight, she found it impossible to feel connected with her feelings and emotions, which poses difficulty when trying to access these for the purposes of therapy. Therefore it will be of the utmost importance for a therapist to ensure that an individual is in a position where they are able to both identify emotions and introduce self-soothing strategies for managing distress. As individuals may find it difficult to accurately express their experiences and difficulties in a way other than through their eating distress and self-harm (Buhl, 2002) this is particularly important. This is also relevant to discharge planning following inpatient treatment. If an individual is left unskilled at managing their emotional distress, they may remain vulnerable to relapse. Therefore treatment models that incorporate emotional regulation components may be appropriate for clients with such difficulties/issues.

A further consideration, which was described by several participants, was the importance of not focussing on weight and food throughout therapy. Poppy described how weighing her during therapy only acted to undermine her progress, particularly as her preoccupation with weight remained at the forefront of her mind. Lisa and Rose also echoed this point as they described being able to talk about food and weight all day long, without necessarily getting to the root of their difficulties. Lisa felt that her connection with her therapist was strengthened by the fact they did not focus on food and weight during therapy; that her therapist connected with her as a person, not just with her eating distress. Therefore it may be important to consider the inclusion of other professionals, such a dietician or practice nurse, especially if

measurements of weight must be kept or food intake discussed as part of treatment. This will be particularly important so as not to undermine the therapeutic relationship between clinician and client.

#### **2.5.4 Future Research**

Given the findings, future research to evaluate whether emotion dysregulation is a potential mediating variable between a history of traumatic experiences and eating distress is warranted. Similarly, understanding the potential of self-regulation strategies in the treatment of eating distress could benefit from further research. In addition to this, further exploration of eating distress behaviours and their potential for regulating affect will help clarify this observation. Finally, a further avenue of research would be to focus on the treatments available that address affect regulation, such as integrative therapies. For example, there have been promising studies, albeit few, using dialectical behavioural therapy for the treatment of eating distress, aimed at improving emotion regulation and self soothing strategies, as well including traditional cognitive strategies (Safer, Telch & Agras, 2001; Salbach-Andrae, Bohnkamp, Pfeiffer, Lehmhuhl & Miller, 2008; Hill, Craighead & Safer, 2011). In addition to this, other integrative therapies may also prove useful in addressing the emotional aspect of treatment, such as cognitive analytical therapy (Bell, 1999). Indeed studies evaluating the role of emotional dysregulation within eating distress has much more to contribute to the evidence base.

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## **Chapter 3: Reflective Paper**

**Personal reflections on the research process:  
Conducting sensitive research with clients with  
eating distress**

Word Count: 2844 (excluding references)

### **3.1 Introduction**

As part of the Doctorate Course in Clinical Psychology, I was required to submit three papers which constitute the doctoral thesis: an empirical paper, a literature review and a reflective paper, the latter of which is described here.

This paper is a reflection on my personal experiences and feelings that emerged throughout the process of conducting research, predominantly whilst carrying out the fieldwork for the empirical paper. During this period of the process, I paid particular attention to the methodological issues that arose as a result of carrying out research and working with individuals with eating distress difficulties. I also discuss the impact this had on the research methodology, the emotions it elicited, and my reflections on what I feel I have learnt from the research process.

### **3.2 Research Subject**

The subject of the empirical paper was a qualitative exploration of women who experience eating distress difficulties and also have a history of traumatic experiences. The literature review also complemented this by addressing the effectiveness of dialectical behaviour therapy for people who have eating distress difficulties. My interest in this subject area dates back to when I worked as an Assistant Psychologist. During this experience, I worked closely with a young woman towards the end of her therapy, who on many levels, was similar to me having the same age and interests. However, our paths had brought us to two very different places. This client had been subject to emotional abuse and had witnessed physical abuse throughout most of her life. She went on to develop severe anxiety and eating distress and consequently felt she was struggling to achieve her personal

goals. She was highly articulate and insightful and made great progress throughout the therapy, but her experiences have stuck with me ever since. As I identified with my client, I found it difficult as I felt that the treatment she had been offered did not necessarily meet all of her needs. Despite this, as a clinician, I have learned to work within the constraints of services and the challenges sometimes experienced.

My experiences with this client were further reignited during my adult placement in the first year of my Clinical Psychology training course. I was referred two young women for eating distress problems; one for assessment and the other for treatment, again with striking similarities to my previous client. I reflected whether I would need to make links with other professionals such as dieticians or nutritionists in order to provide the best package of care for her. Although there was an in-patient eating disorder unit within the locality, who had direct access to these professionals, neither individual met the criteria for referral. Whilst I was not advocating that community treatment was not appropriate, I felt that it would have been helpful that the service provide a multidisciplinary approach from professionals adept at working with these types of difficulties, including nurse specialists, medical professionals and nutritionists, rather than a 'psychologist fits all' approach.

As a result I felt compelled to understand more about the experiences of women with eating distress and trauma histories to explore the issues they felt were most important to them, with a specific focus on the factors they believed played a greatest role in the development of their difficulties, as well as their treatment experiences. It was my hope that this would inform my own clinical practice as well

as highlighting the implications for community services and the treatment of clients with specific psychological needs.

### **3.3 Ethical Approval and Recruitment**

My initial research proposal involved recruiting participants from the health service and so the first hurdle of the research process was obtaining ethical approval. Although the ethics procedure is both complicated and time-consuming, and having heard some of the setbacks my cohort had already experienced with the process, I was determined to pass through it smoothly. Thankfully, my ethics committee were pleased that I had covered all of their concerns and I was given the go-ahead to proceed. For future research I will remember to dedicate as much time as necessary to the ethics process to ensure that each aspect of my research design accounts for every eventuality. Having observed my cohort's experiences, this indeed saves time and heartache in the long run.

Unfortunately, after a promising start with the ethics procedure, recruitment became an area of concern for me. Only one individual from the community services I approached had agreed to take part and with time running out, it was necessary for me to reconsider relying solely on the health service for participants.

After discussion with my supervisors it was agreed I should consider further avenues for recruitment, which led me to the charity organisation BEAT (Beating Eating Disorders). The BEAT ethics procedure required my existing health service approval, and once they were satisfied, they provided me with a gatekeeper letter to state they were happy to advertise my research. Within 24 hours of my research

being agreed and advertised by BEAT, I had a very positive response from forum users and potential participants keen to hear more about my research. This was a huge relief for me, as it allowed me to move forward with my research.

### **3.4 Participants and Participation**

Having spent time reflecting on why the majority of individuals approached within community health services chose not to take part, I considered several issues. Many of the women approached were early on in their recovery and perhaps did not feel comfortable with discussing sensitive issues at this stage of treatment. Shame, guilt and perceived stigma is commonly experienced by women with eating disorders and I wondered if this also played a role in not wishing to take part in a research study (Burney and Irwin, 2000). It was possible that in addition to this the individuals were concerned about whether taking part in the research would affect the relationship they had with their clinician or the treatment they would receive.

Conversely, I considered the reasons why participants might want wish to be involved in the research, For some, there appeared to be an overwhelming sense of wanting to highlight the complex issues they faced and the hope their experiences may help others facing the same difficulties. The idea, “there must be purpose in this pain”, as voiced by Emma, was particularly poignant for me, as I felt that the participants were eager to communicate their desire that their experiences could assist others in their recovery through informing clinical practice. It was also important for participants to have their voice heard as so often their perception was that their eating disorder and trauma history went on unnoticed and ignored. Given the courage it must have taken to discuss their difficulties with a stranger, it was

important for me to ensure I did justice to their experiences in the write up of my empirical paper.

Aside from the above benefit, I also considered whether the drive to take part in the study was a reflection of some of the perceived inadequacies of treatment, as many of the emergent themes were critical of service provision. As the majority of the participants were recruited online, they were self-selecting and so may have had differing motivations to participants who might have been recruited through the National Health Service site. I feel that it is worth bearing in mind that the experiences of participants in this study are not necessarily generalisable to other eating distress clients and perhaps for future research I will endeavour to have a range of participants from different recruitment sites.

### **3.5 Methodological Issues**

In-depth qualitative research, and specifically, Interpretative Phenomenological Analysis (IPA), was a new method of research for me. IPA is concerned with the exploration of lived experiences and therefore allowed me to look in depth at women's experiences of eating distress. However, I found working with this process daunting and at times overwhelming. The feeling of uncertainty plagued me from start to finish, as I doubted whether I was performing the IPA techniques correctly and whether my findings truly reflected the data I had analysed. There are no 'right' answers with IPA and the emerging themes will always be unique to the participant's experiences, not to mention interpretation by the researcher and at that particular time. This was indeed challenging for me. However, it was somewhat reassuring having my coding of the transcripts reviewed and validated by two of my peers. I

found it helpful to distance myself from the material every so often and return to it with fresh eyes when going through the process of identifying and clustering emergent themes.

Another difficulty for me was managing any pre-conceived ideas I had as to what would emerge from the interviews and data. I was aware of the suggested mediating factors between trauma and eating distress, such as low self esteem and depression, as described in the literature so it was difficult to switch off from these. I was also conscious of not wanting to lead my participants with questions pertaining to the background literature or focus discussion whenever familiar concepts were mentioned. I also found it helpful to include a position statement in my empirical paper to show that I was mindful my own experiences may lend potential bias to the interpretation of the data.

### **3.6 Ethics of Carrying out Sensitive Research**

Due to the sensitivity of the topic of my research I considered the ethics of the possibility of disclosures of a distressing and traumatic nature (Sieber and Stanley, 1988). Whilst I refrained from direct questioning of the participants trauma history, inevitably these experiences were referred to throughout the interview. When interviewing participants whose trauma history included childhood abuse, I relied heavily on my skills and experiences as a trainee clinical psychologist in managing these sometimes highly emotive situations. I remained mindful of not asking specific questions about the details of abuse, as this was not the aim of the research. However, participants were still afforded the opportunity to tell me their stories as they saw fit. Although none of the participants became visibly distressed during



their interviews I was aware that I could evoke upsetting memories for them that might lead participants to seek support after the interview. However, I prepared for this by developing a protocol for managing distress including covering confidentiality and sources of support. However, as one participant noted the title of the research did not lead her to believe that we would be talking about “teddy bears and chocolate”.

The role as scientist-practitioner brings with it several ethical considerations. I found myself slipping into the role of therapist and feeling like I was partly wanting to engage with clients’ experiences as I would in therapy. I was concerned the process of interpretation and clarifying meanings during the interviews might be perceived as leading. However, it was important for me to show that I was indeed listening to the participant’s story. I caught myself several times wanting to adopt the role of therapist. I found it helpful therefore to have an interview schedule as I could draw myself back to the topic if I felt we had gone ‘off course’. However, participants were aware that I was not there in a therapeutic role, but hearing experiences of perceived unsatisfactory treatment ignited my natural instinct to fall into the role of therapist. I wondered whether this may also have been part of the emotional transference in the room and reflected my role as a clinician rather than my position as a researcher. This is something I am still considering, which will be important when conducting future research with clients with complex issues.

Despite this, the role of researcher had its advantages too. As I was not employed as a clinician where participants attended treatment, I wondered if this allowed them to speak freely about the treatment experiences they had received, particularly where

those experiences may have been negative. Participants were geographically all over England, and I grew up in Scotland, so the likelihood of me knowing clinicians or teams was very rare indeed. I also considered whether the fact I worked within the locality of recruitment at the health service site may have been a concern for prospective participants. Participants may not have felt able to be open and honest about certain experiences or feel secure that their stories would remain confidential, despite my stressing the confidentiality and ethical boundaries of the research.

### **3.7 Emotional Journey**

Having suffered with my own personal difficulties throughout the research process, finding the motivation to work and the concentration to remain committed, was extremely hard at times. I upset myself by consistently comparing myself to others in the cohort who I perceived were much further ahead in the research process. From the conception of my research idea, and one which I was thoroughly passionate about, I had difficulties finding a consistent clinical supervisor with an interest in eating disorders to support me through the process, which left me thoroughly disheartened. Thankfully, however, an academic tutor from my course came on board, not because this was their subject area, but they could see my passion for my research and they could recall how stressful the process of doctoral research could be without support and guidance. I believe that having a supportive and skilled research team is essential to producing good research. It is also beneficial having now been through the research process as perhaps any future research is likely to be more streamlined, particularly given the competing demands a scientist-practitioner role can bring.

My research journey continued to be a concern for me until I moved my recruitment site to the online charity BEAT. I was overwhelmed with the positive response my advertisement to take part in my research received; twelve emails within hours of it going live. For the first time I felt my research was coming to fruition.

My emotional journey varied between methodology woes and the effect the participant stories had on me. I was prepared for some of the content to be deeply disturbing and emotional, but I was unprepared for my reaction to several of the perceived treatment experiences. I found it disappointing that some participants felt that their treatment experiences had been poor and that very few of the participants had had any psychological intervention at all. Interestingly, positive treatment experience and professional contact was almost limited to private healthcare facilities rather than the health service. I found myself feeling embarrassed and almost ashamed at some of the treatment protocols participants had endured throughout health service treatment, perhaps because this was not my perceived experience of how individuals are treated throughout my training. There were even examples of unsatisfactory treatment by psychologists which was also hard to hear; therefore it was difficult for me not to offer my own professional advice on participants' difficulties; despite this not being my role. This did lead me back to my earlier reflections that perhaps it was these experiences which motivated my participants to take part in my research. Of course it is extremely important to address unsatisfactory treatment due to the clinical implications. However, it would also have been useful to hear more detail about positive treatment experiences as this too informs service provision.

I felt a sense of responsibility to produce a piece of research, which might address some of these adverse treatment experiences. I would also be keen in the future to return to participants with my findings in order to discuss them prior to writing up. This was not possible for this study due to geographical and time constraints. However, it would be in keeping with the ethos of qualitative research and keep the process collaborative throughout the data analysis. Nevertheless, I have endeavoured to produce quality research that will encourage a change to clinical practice, where positive changes are required to provide more comprehensive and user-informed patient care.

### **3.8 Final Thoughts**

Conducting research, not only within a sensitive area, but also with a vulnerable client group has been a rollercoaster of emotion and academic achievement. The doctoral research process has highlighted not only methodological issues, such as the time implications and research procedures, but also the difficulties of conducting research alongside clinical commitments. Despite this, the overall findings and the clinical implications suggested far outweigh the challenges of the research process. I hope to disseminate my study in as many ways as possible. I intend to publish my empirical and literature review papers, which in turn may assist to inform improvements current service provision. I also plan on feeding back my findings to participants as well as BEAT. I sincerely hope that the skills I have learned will be transferred and honed when I commence employment as a qualified clinical psychologist. Finally, my experience has also reassured me of the benefits of working with clients with eating distress and traumatic difficulties, and ensuring that they are heard and their experiences are validated. I very much hope to continue to

conduct clinically relevant research within my new post and not lose sight of my skills as a competent scientist-practitioner.

### 3.9 References

- Burney, J. & Irwin, H. J. (2000). Shame and guilt in women with eating disorder symptomology. *Journal of Clinical Psychology*, 56, 51 – 61.
- Sieber, J. E. & Stanley, B. (1988). Ethical and professional dimensions of socially sensitive research. *American Psychologist*, 42, 735-741.

## **Appendices**

## Appendix 1- Literature Included in the Meta-Analysis

Authors and year of publication	Title	n	Demographics	Measures used	Findings
Ben-Porath, Wisniewski & Warren; 2009	Differential Treatment Response for Eating Disordered Patients With and Without a Comorbid Borderline Personality Diagnosis Using a Dialectical Behavior Therapy (DBT)-Informed Approach	40	Females 1 Male Eating Disorder diagnosis Borderline Personality Disorder United States	EDE BDI-II BAI-II NMRS	On the EDE-Q global scale, all participants reported a reduction in disorder symptoms with a significant main effect of time.
Chen, Matthews, Allen, Kuo & Linehan; 2008	Dialectical Behavior Therapy for Clients with Binge-Eating Disorder or Bulimia Nervosa and Borderline Personality Disorder	7	Females Bulimia Binge-Eating Disorder Borderline Personality	Objective Binge-eating frequency EDE GAS	At post-treatment there were improvements on all outcome measures, with medium effect sizes for the number of non-ED Axis I disorders, suicidal behaviour and self injury, and large effect sizes for objective binge eating and total EDE scores.  At 6 month follow-up, large effect sizes were



			Disorder United States		found for all outcome measures.
Courbasson, Nishikawa & Dixon; 2011	Outcome of Dialectical Behaviour Therapy for Concurrent Eating and Substance Use Disorders	10	Females Eating Disorder Diagnosis Substance Misuse Diagnosis United States	EDE EDI EES BDI NMRS ASI DTCQ-8	<p>Within the DBT treatment group, a significant reduction in binge eating episodes was found which was retained at 3 and 6 month follow up.</p> <p>Main effect of time on the EDI-bulimia scores, ineffectiveness scores and interceptive awareness scores, all of which were retained at follow up.</p> <p>Significant main effects for time on the EDE-restraint scores, eating concern scores, shape concern scores, weight concern scores and global scores.</p> <p>Significant main effects of time were found on the ASI- substance composite scores, but not on the alcohol composite scores or the DTCQ-8.</p>
Hill, Craighead & Safer; 2011	Appetite-Focused Dialectical Behavior Therapy for the Treatment of Binge Eating with Purging: A Preliminary Trial	26	Females Bulimia United States	Vomiting Frequency Objective Binge-eating frequency EDE NMRS PANAS	<p>At post-treatment 26.9% of the 26 individuals who entered treatment were abstinent from binge/purge episodes over the last 28 days.</p> <p>61.5% no longer met full or sub-threshold criteria for bulimia.</p>

				BDI	
Kroger, Schweiger, Sipos, Klien, Arnold, Schunert & Reinecker; 2010	Dialectical behaviour therapy and an added cognitive behavioural treatment module for eating disorders in women with borderline personality disorder and anorexia nervosa or bulimia nervosa who failed to respond to previous treatments. An open trial with a 15-month follow-up	24	Females  Anorexia  Bulimia  Borderline Personality Disorder  Germany	Objective Binge-eating frequency  EDI  BMI  GSI  GAF	At post-treatment, 38% of participants with anorexia had recovered.  50% had developed bulimia and one remained anorexic.  Just over half of participants with bulimia no longer met the criteria for the disorder and 5 participants were abstinent from binge eating episodes.
Safer, Robinson & Jo; 2010	Outcome From a Randomized Controlled Trial of Group Therapy for Binge Eating Disorder: Comparing Dialectical Behavior Therapy Adapted for Binge Eating to an Active Comparison	50	Females and Males  Binge-Eating Disorder  United States	BMI  EDE  EES  PANAS  BDI  RSES	Post-treatment binge eating abstinence and reduction in binge frequency was achieved more quickly with DBT-BED than the ACGT group.

	Group Therapy				
Safer, Telch & Agras, 2001	Dialectical Behavior Therapy for Bulimia Nervosa	14	Females  Binge-Eating Disorder  Bulimia  United States	Vomiting Frequency  Objective Binge-eating frequency  EES  PANAS  NMRS  RSES  BDI	28.6% of participants from the DBT group were abstinent from binge/purge behaviours, compared with no participants in the control group.  35.7% of participants from the DBT group were found to have mild symptoms of bulimia, where they had reduced their number of objective binge eating days by 88% and purging episodes by 89%.
Salbach-Andrae, Bohnkamp, Pfeiffer, Lehmhuhl & Miller, 2008	Dialectical Behavior Therapy of Anorexia and Bulimia Nervosa Among Adolescents: A Case Series	11	Females  Anorexia  Bulimia  Germany	Vomiting Frequency  Objective Binge-eating frequency  EDI  GSI  BMI  SIAB-EX	A significant reduction in vomit frequency, as well as binge frequency.  Prior to treatment, all participants engaged in food restriction, whereas at post-treatment a reduction in food restriction was reported for 75% of participants.

Telch, Agras and Linehan; 2000	Group Dialectical Behavior Therapy for Binge-Eating Disorder: A Preliminary, Uncontrolled Trial	11		<p>Objective Binge-eating frequency</p> <p>BMI</p> <p>EDE</p> <p>BES</p> <p>NMRS</p> <p>EES</p> <p>PANAS</p> <p>RSES</p> <p>BDI</p>	
Telch, Agras & Linehan, 2001	Dialectical Behavior Therapy for Binge Eating Disorder	18	<p>Females</p> <p>Binge-Eating Disorder</p> <p>United States</p>	<p>Objective Binge-eating frequency</p> <p>EDE</p> <p>BES</p> <p>NMRS</p> <p>EES</p> <p>PANAS</p> <p>RSES</p>	Women in the DBT group had achieved significant improvements on their binge eating symptomology in comparison to the waiting list control group, where both binge days and episodes had significantly decreased

				BDI	
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## Appendix 2: Full List of Measures.

Measure	Authors
Addiction Severity Index (ASI)	McLellan, Kusher, Metzger, Peters, Smith, Grisson & Pettinati (1992).
Beck Anxiety Inventory-2 (BAI-2)	Beck & Steer (1990)
Beck Depression Inventory (BDI)	Beck, Ward, Mendelson, Mock, & Erbaugh (1961)
Beck Depression Inventory- 2 (BDI-2)	Beck, Steer & Brown (1996)
Binge Eating Scale (BES)	Gormally, Black, Daston & Rardin (1982)
German version of the Beck Depression Inventory (BDI)	Hautzinger, Bailer, Worrall, & Keller (1995)
Difficulties in Emotion Regulation Scale (DERS)	Gratz & Roemer (2004)
Drug Taking Confidence Questionnaire-Short Version (DTCQ-8)	Sklar, Annis & Turner (1997)
Eating Disorder Examination (EDE)	Fairburn & Cooper (1993)
Eating Disorder Examination-Questionnaire (EDE-Q)	Fairburn & Beglin (1994)
German version of the Eating Disorder Inventory (EDI-2)	Paul & Thiel, 2005
German version of the Eating Disorder Inventory-2 for children and adolescents	Rathner & Waldherr (1997)
Emotional Eating Scale (EES)	Arnold, Kenardy & Agras (1995)
International Personality Disorder Examination (IPDE)	Loranger (1995)
Interceptive Awareness Scale-Expanded (IA-E)	Craighead & Niemeier (2002)
Lifetime Parasuicide Count (LPC)	Linehan & Comtois (1996)
Mizes Anorectic Cognitions Scale-Revised (MACR-32)	Mizes, Christiano, Madison, Post, Seime & Varnado (2000)
Multidimensional Personality Questionnaire (MPQ)	Tellegen & Waller (1994)
Negative Mood Regulation Scale (NMRS)	Catanzaro & Mearns (1990)
Personality Disorders Examination (PDE)	Loranger (1995)
Personality Diagnostic Questionnaire	Hyler (1994)

(PDQ-4)	
Positive and Negative Affect Schedule (PANAS)	Watson, Clark, & Tellegen (1988)
Preoccupation with Eating Weight and Shape Scale (PEWS)	Craighead & Niemeier (1999)
Questionnaire on Eating and Weight Patterns (QEWP)	Spitzer, Devlin, Walsh, Hasin, Wing, Marcus, Stunkard, Wadden, Yanovski, Agras & Nonas (1992)
Rosenberg Self-Esteem Scale (RSES)	Rosenberg (1979)
Social History Interview (SHI)	Linehan & Heard (1994)
Structured Clinical Interview for DSM-IV Axis I disorders (SCID-I)	First, Spitzer, Gibbon, & Williams (1995)
Structured Clinical Interview for DSM-IV Axis II disorders (SCID II)	First, Gibbon, Spitzer, Williams, & Benjamin (1997)
The German version of the Structured Clinical Interview for DSM-IV (SCID-I)	Wittchen, Wunderlich, Gruschitz, & Zaudig (1997)
The German version of the Structured Clinical Interview for DSM-IV Personality (SCID-II)	Fydrich, Renneberg, Schmitz, & Wittchen (1997)
German version of the Symptom Checklist-90 Revised (SCL-90-R)	Franke (2002)
Structured Inventory for Anorectic and Bulimic Syndromes (SIAB-EX)	Fichter & Quadflieg (2001)
Suicide Attempt Self-Injury Interview (SASII)	Linehan, Comtois, Brown, Heard & Wagner (2006)
Treatment History Interview (THI)	Linehan & Heard (1987)

### **Appendix 3: Current Clinical Definitions of the Eating Disorders.**

Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> Edition (DSM-IV), American Psychiatric Association (1994) p539-550

#### **Diagnostic Criteria for Anorexia Nervosa 307.1**

- Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g. weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).
- Intense fear of gaining weight or becoming fat, even though underweight.
- Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.
- In postmenarcheal females, amenorrhoea, i.e. the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhoea if her periods occur only following hormone, e.g. oestrogen, administration).
- **Restricting type:** During current episode of Anorexia Nervosa, the person has not regularly engaged in binge-eating or purging behaviour.
- **Binge-eating/purging type:** During the current episode of Anorexia Nervosa the person has regularly engaged in binge-eating or purging behaviour.

#### **Diagnostic Criteria for Bulimia Nervosa 307.51**

- Recurrent episodes of binge eating. An episode of binge eating is characterised by both of the following: (1) eating, in a discrete period of time e.g. within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar



circumstances; (2) a sense of lack of control over eating during the episode (e.g. a feeling that one cannot stop eating or control what or how much one is eating).

- Recurrent inappropriate compensatory behaviour in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting or excessive exercise.
- The binge eating and inappropriate compensatory behaviours both occur, on average, at least twice a week for 3 months.
- Self-evaluation is unduly influenced by body shape and weight.
- The disturbance does not occur exclusively during episodes of Anorexia Nervosa.
- **Purging type:** During the current episode, the person has regularly engaged in self-induced vomiting or the misuse of laxatives.
- **Non-purging type:** During the current episode of Bulimia Nervosa, the person has used other inappropriate compensatory behaviours, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

#### Diagnostic Criteria for Eating Disorders Not Otherwise Specified 307.50

Eating disorder not otherwise specified includes disorders of eating that do not fully meet the criteria for any specific eating disorder.

- For female patients, all of the criteria for anorexia nervosa are met except that the patient has regular menses.
- All of the criteria for anorexia nervosa are met except that, despite significant weight loss, the patient's current weight is in the normal range.

- All of the criteria for bulimia nervosa are met except that the binge eating and inappropriate compensatory mechanisms occur less than twice a week or for less than 3 months.
- The patient has a normal body weight and regularly uses inappropriate compensatory behaviour after eating small amounts of food (e.g. self-induced vomiting after consuming two cookies).
- Repeatedly chewing and spitting out, but not swallowing, large amounts of food.

Although not specifically listed within the DSM-IV, Binge-eating Disorder is characterised by recurrent episodes of binge eating in the absence of regular inappropriate compensatory behaviour as with bulimia nervosa.

#### **Appendix 4: Estimates of Incidence, Prevalence and Prognosis.**

Current evidence suggests that eating distress affect 1.1 million people in the UK (BEAT, 2012), being more common in females, affecting about 1 in 250 women (Hoek 1995). Over 30% of the population are affected by obesity, with anorexia nervosa (AN) and bulimia nervosa (BN) rapidly growing amongst adolescents (Leibowitz 1995). As young minds are fed with images in popular media of size zero models, body weight and body image difficulties are becoming more widespread in mainstream western society (Almond 2000). There is also growing evidence of an increased incidence over the past twenty years of eating distress in men with a prevalence rate of 5-10% (Hoek, 1995 & Rome, 2003). Tiggemann, Gardiner & Slater (2000) undertook research with adolescent females and found that body image dissatisfaction and teasing were significant factors contributing to the onset of eating distress, provoking early insecurity about physical appearance.

Research into eating distress indicates that eating distress are notoriously difficult to treat, with anorexia nervosa having the highest mortality rate of any psychiatric illness (Gremillion, 2003). According to the Royal College of Psychiatrists (2006), if it remains untreated, fifteen percent of people diagnosed with anorexia will die from the disorder within twenty years of its onset.

## **Appendix 5: Interpretative Phenomenological Analysis.**

Interpretative Phenomenological Analysis, IPA, (e.g. Smith & Osborn, 2003; Smith, Flowers & Larkin, 2009) was used to explore the themes arising from the narratives of the lived experiences of women with eating distress who have both a diagnosis of an eating distress and a past history of trauma. As mentioned above, IPA was chosen as it is concerned with exploring individuals' personal perceptions of experiences as opposed to, attempting to produce an objective statement or explanation of the event. IPA is a qualitative approach which was developed for use specifically within psychology. Qualitative research is valuable when human experience cannot be described with numbers, nor explained by manipulating, measuring or controlling variables. Results from qualitative studies are subjective and rich in information because they are set in realistic and naturalistic settings which in turn lead to a high level of realism. This research emphasises meanings, experiences, descriptions and so on. Raw data will comprise of exactly what people have said in interviews or recorded conversations, or a description of what has been observed. This means that in a qualitative interview, the participant would be asked such questions about their personal experiences, for example; 'how do you feel about...', or 'tell me about your experience of...', or 'what do you think about...'. Here, the research material is taken directly from the responses of the participants rather than the researcher's perception of observed behaviours. Qualitative research has the advantage that it looks at a deeper understanding of how an individual and society interact.

IPA is used where the study is focused on understanding live experiences, interviews about which are then analysed. As qualitative approaches are concerned with

exploring the richness of human experience, IPA looks for meaning behind these experiences. IPA looks to provide a “detailed examination of the participant’s lifeworld; it attempts to explore personal experience and is concerned with an individual’s personal perception or account of an object or event” (Smith, 2004). As IPA pays particular attention to the participant’s personal world, while accepting that this cannot be done completely, it recognises that while a person’s thoughts are not transparent on the page, engaging in an analytic process can say something about that thinking:

“One is attempting to capture the meaning of the phenomenon to the participant but this necessarily involves an interpretative engagement with the participants text” (Smith, 1996 p. 172).

It is also important to acknowledge that the researcher’s own comprehensions are vital in order to gain access to and make sense of these experiences. Whilst IPA does not claim to be able to produce a definitive reading of participants’ accounts, instead, the results of this analysis are “a construction between participant and analyst which emerges from the analysts’ interpretation of the participants’ text” (Osborn & Smith, 1998). Therefore as IPA is both phenomenological and social constructionist, this fits well when looking to study the experience of women’s distress (Cosgrove, 2000).

Most importantly IPA was chosen as it does not seek to make generalizations about larger populations, which may be true with quantitative methodology, but rather arrive at claims more cautiously, and only after the painstaking analysis of the individual cases (Smith & Osborn, 2003; Smith *et al.* 2009). Indeed Smith (2004; pg 42) goes on to cite Warnock (1987) when making his point about the nature of

IPA, where Warnock states that “delving deeper into the particular also takes us closer to the universal”.

Jonathan Smith (the originator of IPA) and his colleagues had recently published *Interpretative Phenomenological Analysis: Theory, Method and Research*. In it they reflect on the maturation of IPA, and how researchers are now adopting very small sample sizes, and even single case studies. They emphasise that this is because IPA’s primary concern is with a detailed account of individual experience, which benefits from a concentrated focus on a small number of cases (Smith *et al.* 2009). As such, they recommend that between three and six participants is reasonable for a student project using IPA, and they observe that the typical number of interviews analysed in professional doctorate projects (between four and ten) “seems about right”, with emphasis that it is “important not to see the higher numbers as being indicative of ‘better work’” (pg. 52).

**Programme Director**  
**Doctorate Course in Clinical Psychology** 24/05/2011  
Dr Eve Knight  
BSc Clin.Psy.D. CPsychol

## Appendix 6

# Coventry and Warwickshire Partnership Trust

## Invite Letter

Dear Participant,

My name is Victoria Magrath and I am a Trainee Clinical Psychologist. I am carrying out a study as part of a Doctoral qualification in Clinical Psychology. You have been identified by your named clinician as someone who may be interested in participating in this research study.

I therefore would like to invite you to take part in a piece of research exploring how women with eating distress perceive the lived experience of their eating difficulties. Before you decide whether you would like to give consent to take part, please take the time to read the Participant Information Sheet enclosed in this invitation. I have written this information in order to help you understand why the research is being carried out and what it will involve. After having read the Information Sheet, and you would like to discuss taking part in the study further, please contact me on the details below or provided on the sheet.

I look forward to hearing from you,

Victoria Magrath  
Trainee Clinical Psychologist

Victoria Magrath  
Trainee Clinical Psychologist  
[magrathv@uni.coventry.ac.uk](mailto:magrathv@uni.coventry.ac.uk)

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Telephone messages can be left for either of us through the Course Administrator, Maria McDermott, on 02476 888328

## Appendix 7

# Coventry and Warwickshire Partnership Trust

## Eating Distress and a History of Trauma

### Participant Information Sheet

#### Introduction

You have been invited to take part in a piece of research exploring how women with eating distress perceive the experience of their eating difficulties. Before you decide whether you would like to give consent to take part, please take the time to read the following information, which I have written in order to help you understand why the research is being carried out and what it will involve.

#### The researchers

My name is Victoria Magrath and I am a Trainee Clinical Psychologist. I am carrying out this study as part of a Doctoral qualification in Clinical Psychology. The research is being supervised by Dr Helen Liebling-Kalifani (Academic Tutor at Coventry University and Consultant Clinical Psychologist Coventry and Warwickshire NHS Partnership Trust) and Dr Carolyn James (Academic Tutor at Coventry University and Clinical Psychologist Coventry and Warwickshire NHS Partnership Trust).

#### What is the purpose of the research?

This study aims to gain an in-depth understanding of how women with eating distress perceive the experience of their eating difficulties; what their views are on how they developed eating distress; what life experiences they feel are relevant to developing eating distress; what ways their eating distress affects their daily life; and what their experiences of receiving therapeutic interventions for their eating distress have been. Whilst existing research indicates that trauma during childhood represents a strong antecedent to developing eating distress in later life there has been little investigation of how this process comes about. It is hoped that this study, which aims to give a voice to women with eating distress themselves, will enhance healthcare professionals' understanding, and thereby contribute to promoting prevention and recovery.

#### Why have I been invited to take part in the study?

All female patients from Coventry and Warwickshire NHS Partnership Trust Community Mental Health Teams and females from Beat (national eating disorder charity) have been invited to take part. I am hoping that between four and ten women will agree to take part and share their experiences for this study.

#### Do I have to take part?

You are under no obligation to take part, and even after agreeing to do so you may change your mind *at any time*, without having to give a reason. Participation is entirely voluntary and your decision will not affect the standard of care you receive in any way. In making your decision you may wish to seek advice from somebody independent, for example, a friend, family member, or trusted professional.



### **What is involved?**

If you decide that you would like to take part, please contact me using the details below. You can ask me some more questions about the research if you would like, after which you can take some more time to think about it, or we can arrange a time and place to meet. This can either be at a mutually convenient place or in your own home if this is more comfortable for you.

During this meeting I will first check to see if you have any further questions, or if you have changed your mind. If you are still happy to go ahead I will ask you to sign a consent form to say that agree to take part in this research. I will then carry out an interview with you for around 1 hour to 1 ½ hours. During this time we will discuss: how your eating problems affect your life at the moment; how your eating problems started/developed; how your eating problems affect your relationships with other people; how your eating problems have changed over time; how you would describe yourself as a person, how your difficulties with eating have changed the way you think or feel about yourself; any positive changes have you made; what your experiences of therapy have been; and what would you like in your future.

The interview will be audio-recorded and after the interview you will have an opportunity to ask any questions and raise any concerns you may have.

### **What will happen to this information?**

The recording of the interview will be typed out so that the information can be looked at in detail. The aim of this is to uncover common themes that are important in understanding the experiences we have discussed. The recordings and the typed out transcripts will be made anonymous and kept in a locked storage facility kept on NHS premises. In addition to the information collected from the interview, I will also ask consent to collect some background information from your records (e.g. age range, ethnic group, Body Mass Index, principal diagnosis, eating disorder diagnosis, trauma history, and presence/absence of a self-harm history and what treatment you have had). Anonymised sections of the information collected from the interview will be looked at by my supervisors, and may also be looked at by representatives from academic and professional assessment bodies in order to assess the quality of this doctoral research project. If you give additional consent, I would also like to discuss anonymous parts of the transcript with a group of my colleagues who are interested in this type of research and may assist me in the analysis (they are all Trainee Clinical Psychologists like myself and have the same duty of confidentiality towards all participants).

As part of the doctoral programme, I will write up a report of the research. Within this report I may include anonymous extracts of the interview to illustrate themes that have been discussed. These extracts will not include any information that could identify participants. I will also write a shorter article for publication in an academic journal, this may also include brief anonymous extracts of the interview. There is the potential that the research findings may be presented at conferences in the future, but again this would not include any information that could identify participants. I will also ask if you would like me to send you a summary of the research findings when the study is complete. A summary of the findings will also be sent to Beat.

**Programme Director**  
**Doctorate Course in Clinical Psychology** 24/05/2011  
Dr Eve Knight  
BSc Clin.Psy.D. CPsychol

Please note that the transcriptions of your data will be confidentially destroyed at the end of the study. Any other data relating to the study is required to be kept by Coventry University for a total of 5 years.

This data will be kept confidential and secure in a locked cabinet within the University. It will then be confidentially destroyed after the period of 5 years.

### **What are the possible disadvantages and risks of taking part?**

You will be asked to discuss your views about yourself in some detail, the experiences you have had that have contributed to your difficulties, and how you think this has affected your eating. This could be potentially distressing, and every measure will be taken to minimise the risk of distress. If during the interview you are asked a question that you are not happy to answer you can skip it, and if you do become upset, you will be given the option to take a break or stop the interview altogether.

Following the interview, I will be available if you feel you need some time to talk about any issues raised. I will be able to advise you of who you can talk to if you need further support, and will give you an information sheet with details of sources of support.

### **What are the potential benefits of taking part?**

I cannot promise that the study will help you, but the information we get from this study will help improve the understanding of eating distress and may therefore help improve treatment in the future. You may also appreciate having the opportunity to talk openly about your experiences.

### **What will happen if I don't want to carry on with the study?**

If you decide you want to withdraw from the study please let me know by contacting me on the email address or phone number given at the end of this information sheet. If you have completed the interview you will be asked what you would like to happen to the data. It can either be included in the study, or destroyed. Either option is perfectly acceptable. Your decision of whether to take part or withdraw from the study will not affect the care you receive from your named professional.

### **What if there is a problem?**

If you have a concern about any aspect of this study, you can contact me and I will do my best to answer your questions. Alternatively you could contact my research supervisor, Helen Leibling-Kalifani, through Coventry University (see contact details below).

### **Will my taking part in this study be kept confidential?**

All information which is collected about you during the course of the research will be kept strictly confidential, and any information about you which leaves the NHS premises will have your name and address removed so that you cannot be identified. As with any health professional, there are limits to confidentiality. If you disclose any information which suggests that either you, or someone else, is at risk of harm then I am obliged to breach confidentiality and inform someone (this is likely to a named clinician and/or your GP). I will do my best to discuss this with you first.

### **Who has reviewed the study?**

All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your safety, rights, wellbeing and dignity.

**Programme Director**  
**Doctorate Course in Clinical Psychology** 24/05/2011  
Dr Eve Knight  
BSc Clin.Psy.D, CPsychol

This study has been reviewed and approved by the West Midlands Research Ethics Committee- Black Country.

### Contact Details:

Victoria Magrath  
Trainee Clinical Psychologist  
[magrathv@uni.coventry.ac.uk](mailto:magrathv@uni.coventry.ac.uk)

Dr Helen Liebling-Kalifani  
Consultant Clinical Psychologist  
Coventry University  
[Helen.liebling@coventry.ac.uk](mailto:Helen.liebling@coventry.ac.uk)

Telephone messages can be left for either of us through the Course Administrator, Maria McDermott, on 02476 888328

## Appendix 8

# Coventry and Warwickshire Partnership Trust

## Eating Distress and a History of Trauma

### Participant Consent Form

**Title of Project:** The personal experience of Eating Distress in the context of a history of Trauma: A Phenomenological Analysis.

**Researcher:** Victoria Magrath, Trainee Clinical Psychologist

*Please initial box:*

**1)** I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information and if needed ask questions that were satisfactorily answered.

☐

**2)** I understand that participation is voluntary and that I am free to withdraw at any time, without giving any reason.

☐

**3)** I understand that my information will be filed in a locked cabinet and the information I provide will be anonymised for the use of the study.

☐

**4)** I give consent to the audio-taping and transcription of the interview, and the use of direct quotes in the write-up of the study (which I understand will be anonymised).

☐

**5)** I understand that relevant sections of my medical notes and data collected during the study may be looked at by individuals from Coventry and Warwick Universities, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.

☐

.....

.....

.....

Name of participant

Date

Signature





## Appendix 9

# Coventry and Warwickshire

Partnership Trust

## Interview Schedule

Q1. Can you tell me how eating problems affect your life at the moment?

*Possible prompts:* What difficulties do you face? How do you feel? How does your eating help you?

Q2. Can you tell me how your eating problems started/developed?

*Possible prompts:* How long ago did it start? Why do you think it started? What was going on in your life at the time? Can you describe how you felt about your eating at that time?

Q3. Can you describe how your eating problems affect your relationships with other people?

*Possible prompts:* partner, family, friends, work colleagues?

Q4. Have your eating problems changed over time?

*Possible prompts:* In what ways? Does anything make it better? Does anything make it worse? What do you think has influenced these changes?

Q5. How would you describe yourself as a person?

*Possible prompts:* How do you feel about yourself?

Q6. Have the difficulties you have with eating changed the way you think or feel about yourself?

*Possible prompts:* Do you see yourself differently now than before your eating difficulties? In what ways?

Q7. What positive changes have you made?

*Possible prompts:* How has your situation improved? What has helped with this? What does that feel like?

Q8. What have been your experiences of therapy?

*Possible prompts:* Is there anything else which would have helped you?

Q9. What would you like in your future?

*Possible prompts:* What will help you achieve this?

## Appendix 10

# Coventry and Warwickshire

Partnership Trust

## Eating Distress and a History of Trauma

### Debriefing Information Sheet

*Thank you very much for making this study possible.*

This study aims to explore how women with eating distress perceive the lived experience of their eating difficulties. I was particularly interested in:

- What your views were on how you developed eating distress
- What life experiences you felt were relevant to developing eating distress
- What ways your eating distress affects your daily life, and
- What your experiences of receiving therapeutic interventions for your eating distress have been

Existing research indicates that trauma during childhood represents a strong antecedent to developing eating distress in later life. Whilst the published literature has examined this link, there is little research examining the underlying relationship between these two presenting problems. Researchers have argued that further research into the lived and in-depth experiences of these individuals may uncover the processes that may be involved in this relationship. Exploring the experience of eating distress from a personal perspective may also be helpful in promoting prevention of and recovery from eating disorders.

### Sources of Comfort and Help

Talking about your experiences may have left you feeling low or upset. This is quite normal and should pass within a few days. However, if these feelings persist there are local sources of support and comfort which may already be familiar to you.

1. Immediate sources of comfort and help are likely to be your own family and friends. It may help to share your experience of taking part in the research with those you are close to.
2. As you know, your named clinician at either the Eating Disorder Service or CMHT is aware of this study, and you have the option to talk to them about how you feel following participation.
3. There are also a number of national organisations who can also offer you support. For example:
  - **beat** (tel. 0845 634 1414; [www.b-eat.co.uk](http://www.b-eat.co.uk); [help@b-eat.co.uk](mailto:help@b-eat.co.uk)). **beat** (the working name of the Eating Disorders Association) is the leading UK charity for people with eating disorders and their families, providing information, help and support. Their helpline staff have received a comprehensive training programme, and are there to listen. They will offer information about treatment and other sources of help available, encouraging callers to make their own decisions about a way forward.

**Programme Director**  
**Doctorate Course in Clinical Psychology** 24/05/2011  
Dr Eve Knight  
BSc Clin.Psy.D. CPsychol

- They will also be able to give information about beat resources, books, leaflets etc., and can post out a basic information pack. The helpline is open from 10.30am to 8.30pm Mon-Fri; 1pm to 4.30pm on Sat, closed on Sun and open 11.30am to 2.30pm on Bank Holidays.
- **The Samaritans** (tel. 08457 909090; [www.samaritans.org](http://www.samaritans.org)). The Samaritans is a helpline which is open **24 hours a day** for anyone in need. It is staffed by trained volunteers who will listen sympathetically.

4. You are welcome to contact me again to discuss any aspect of your participation in this study, to share any concerns you might have or to ask questions.

**Contact details:**

Victoria Magrath  
[magrathv@uni.coventry.ac.uk](mailto:magrathv@uni.coventry.ac.uk)  
Tel: 02476 888328

**Postal Address:**

Doctorate of Clinical Psychology  
Coventry University  
Priory Street  
Coventry  
CV1 5FB

5. If you have further concerns that you would like to raise with the University of Coventry, you can contact either of my Academic Supervisors:

Dr Helen Liebling-Kalifani  
[Helen.liebling@coventry.ac.uk](mailto:Helen.liebling@coventry.ac.uk)  
Tel: 02476 888328

Dr Carolyn James  
[Carolyn.james@coventry.ac.uk](mailto:Carolyn.james@coventry.ac.uk)  
Tel: 02476 888328

**Postal address:**

Doctorate of Clinical Psychology  
Coventry University  
Priory Street  
Coventry  
CV1 5FB

***Thank you again for taking part***



## **Appendix 11: IPA Coding Procedure**

Developed from the method by Smith, Flowers and Larkin (2009), the procedure as described by Willig (2008) was followed in order to analyse the data transcripts.

Cited from Willig (2008) each stage was conducted as follows:

Stage 1: The researcher's initial encounter with the text- the researcher reads and re- reads the interview transcripts. Notes are made that reflect initial thoughts and observations.

Stage 2: Identification of themes- the researcher identifies themes that characterise sections of the transcript. The themes should capture the essential quality of what is represented by the text. Psychological terminology is often used at this stage.

Stage 3: Clustering of themes- the researcher lists the themes identified in stage 2 and considers them in relation to one another. Clusters of themes are then given labels to capture the essence of what is described.

Stage 4: Production of a summary table (integrating cases)- a summary table of the themes is produced. The table needs to include the cluster labels together with their subordinate theme labels.

Whilst it is suggested to add brief quotations to the table to illustrate each theme, this however was not included. Instead, each theme is described in detail within the Results section of the paper.

During Stage 3, in order to facilitate the clustering of themes, an exhaustive list of themes was collated (as described in Appendix X) and each one was put on a post-it note. This enabled the author to move around and consolidate themes into super- and sub-ordinate themes with ease.

## Appendix 12: Coding Example

Initial Themes	Section of Transcript	Line by Line Coding
<ul style="list-style-type: none"> <li>- Feeling unsafe</li> <li>- No sense of control</li> </ul>	<p><b>P:</b> I went when I was nine, I think I was a very lost, unhappy, scared and vulnerable girl but on the surface you would never have realised there was a problem because I tried to keep the peace and tried to do right by everybody so that is all that mattered. I think for anybody at that age, and I have only realised in recent years when I see children of that age just how expressive they are, how I just would have gone along with what was expected and told of me to do.</p> <p><b>I:</b> I think when you're quite unhappy and haven't maybe had the attention you needed when growing up, it can be seen as quite rejecting being sent to boarding school.</p> <p><b>P:</b> I guess it must have been for me, yes. I suppose I am still in the process of facing that and understanding those things.</p> <p><b>I:</b> so throughout the course of being at boarding school did things get better or change?</p> <p><b>P:</b> no, I deteriorated a lot at boarding school. I started to self harm and I overdosed but for whatever reason things were not addressed or are looked upon and I certainly wasn't a person in my own right able to say, I need some help here. Things for many reasons were brushed under the carpet so I continued to have an eating disorder up until my early 20s before telling anybody, and within that time it has brewed for years.</p>	<ul style="list-style-type: none"> <li>- Feeling lost, scared, vulnerable</li> <li>- Protecting others</li> <li>- Other children expressive</li> <li>- No sense of autonomy</li> <li>- Making sense of experiences</li> <li>- Mental health deteriorating</li> <li>- Overdosed</li> <li>- Difficulties ignored/not addressed</li> <li>- No voice</li> <li>- Problems hidden</li> <li>- Unable to tell anyone</li> <li>- Distress life long</li> </ul>

<ul style="list-style-type: none"> <li>- Ignored by others</li> <li>- Eating distress invisible</li> <li>- Better mental health awareness</li> <li>- Disconnected from feeling</li> <li>- Dissociation</li> <li>- Distress from feelings</li> </ul>	<p><b>I:</b> it sounds like still there was nobody there to look after you or notice there was a problem?</p> <p><b>P:</b> no, people noticed but because it didn't, maybe out of fear or because it mucked up their image or scene, it was much better to pretend it wasn't there. I think sometimes when a problem, especially a mental health problem or a psychiatric problem back in the 1980s, it's not the same as having those problems now, there is now a lot more awareness and a lot more to help young people.</p> <p><b>I:</b> so the whole time, having lots of feelings of being alone and down, did you eating help you with those, how did you eating help you through?</p> <p><b>P:</b> I would not have known my feelings then, it is only now that I can surmise what I might have been feeling and I'm feeling those feelings now.</p> <p><b>I:</b> so there was a lot of avoidance of strong emotions?</p> <p><b>P:</b> I would not have ever felt any, I have only recently got in touch with feelings and emotions hence why things have got a bit more turbulent.</p> <p><b>I:</b> that sounds about right, yeah. Would you say you were quite dissociated back then?</p> <p><b>P:</b> yes.</p>	<ul style="list-style-type: none"> <li>- Ignoring eating distress</li> <li>- Ruining others 'image'</li> <li>- More awareness and acceptance of mental health now</li> <li>- Not knowing feelings</li> <li>- Disconnected from feeling</li> <li>- Connecting with feelings means distress</li> <li>- Dissociated</li> </ul>
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### **Appendix 13- Exhaustive List of Themes after Analysis**

Absence of self-concept.  
Total dislike of self.  
Only good at losing weight.  
Bullying by others.  
Comparing self to friends.  
Being in control.  
Happiness with self through weight loss.  
Weight-loss means self-accomplishment, freedom and relief.  
Wanting to punish self.  
Hospitalisation due to health problems.  
Hospitalisation for re-feeding program.  
Identity confusion.  
Feeling like a failure.  
Never good enough.  
Pretending to be a different person to protect the self from rejection.  
Moving between different eating disorders.  
Negative about self.  
People given a choice of treatment.  
Instability in life.  
Links to past trauma.  
Loss of self.  
Comparisons with others.  
Eating distress makes me feel safe.  
Eating distress is a positive thing in life.  
Family were unaffectionate and critical every day.  
Being bullied by siblings and not protected by parents.  
Health problems as a result of eating distress.  
Helping others through own experiences.  
Feelings of hopelessness.  
Cutting reduces anxiety and improves mood.  
Dealing with emotions.  
Denial of eating distress.  
Being criticised appearance and weight.  
Unable to trust.  
Coping through restricting and cutting.  
Negative treatment experiences.  
Not feeling ready for treatment.  
Eating distress takes over life.  
Receiving a diagnosis.  
Eating distress ignored and invisible.  
Food not always accessible.  
Gaining attention.  
Self compassion.  
Self criticism.  
Trashing body  
Treatment re-traumatising.  
A self deserving of punishment.  
Dissociation from self.

Eating in front of people.  
Re-feeding equals treatment.  
Rejection by others.  
Relapsing.  
Low weight is a vicious circle.  
Positive therapy experiences.  
Prevented from engaging in eating distress.  
Silent suffering.  
Struggle with recovery.  
Eating distress boosts self worth.  
Abuse invisible.  
Acceptance of eating distress.  
Lying about situation.  
Making self sick- guilt about eating.  
Maturity fears.  
Attention from peers boosts self esteem.  
Blaming parents.  
Criticised by parent.  
Depression.  
Eating distress interfering with work.  
Image distortion.  
Insight into eating distress.  
Low weight equals acceptance.  
Protecting others from truth.  
Realisation home life not normal.  
Self Harm.  
Sexual abuse.  
Substance abuse.  
Cutting releases emotional pressure.  
Happiness with self through weight-loss.  
One thing I'm good at.  
Recovery is a frightening experience.  
Restricting food and feeling guilty.  
Self Blame.  
Relationship family, food, friends, therapist and parents.

## **Appendix 14: Coventry University Ethics Letter of Approval**

**REGISTRY RESEARCH UNIT**  
**ETHICS REVIEW FEEDBACK FORM**

(Review feedback should be completed within 10 working days)

**Name of applicant:** Victoria Magrath **Faculty/School/Department:** ...PSYCH.....

**Research project title:** The Personal Experience of Eating Distress in the Context of a History of Trauma; A Phenomenological Analysis.

Comments by the reviewer

**1. Evaluation of the ethics of the proposal:**

This proposal appears to be well thought out and although it intends to recruit individuals from a vulnerable adult clinical population it does not pose any significant ethical concerns.

**2. Evaluation of the participant information sheet and consent form:**

Participant information, debriefing and consent sheets / forms are well thought through and sensitive to the impact this proposed research may have on participants.

I would however like to see reference (in the participant info sheet) to the fact that audio taped recordings will be destroyed after transcription –to further ensure and protect participant confidentiality.

I would also like to draw your attention to the impact of offering participants the right to withdraw their data at any time. While acceptable in many quantitative studies, withdrawing qualitative data once it has been subject to analysis is complex and may undermine the whole project. It may also be impossible to do in practice.

Do you need to offer participants a deadline up until which they can withdraw their data but after which they cannot for valid methodological reasons?

You may also want to amend your proposed IRAS research time line before it goes to IRAS for review.

**3. Recommendation:**

(Please indicate as appropriate and advise on any conditions. If there any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer).

☐

Approved - no conditions attached

☒

Approved with minor conditions (no need to resubmit)

☐

Conditional upon the following –please use additional sheets if necessary (please re-submit)

☐

Rejected for the following reason(s) –please use other side if necessary

☐

Further advice/notes - please use other side if necessary

**Name of reviewer:** Dr Adrian Neal

**Signature:** .....

**Date:** 16/05/2011

**REGISTRY RESEARCH UNIT**  
**ETHICS REVIEW FEEDBACK FORM**

(Review feedback should be completed within 10 working days)

**Name of applicant:** Victoria Magrath **Faculty/School/Department:** ... PSYCH.....

**Research project title:** The Personal Experience of Eating Distress in the Context of a History of Trauma; A Phenomenological Analysis.

Comments by the reviewer

**1. Evaluation of the ethics of the proposal:**

This proposal appears to be well thought out and although it intends to recruit individuals from a vulnerable adult clinical population it does not pose any significant ethical concerns.

**2. Evaluation of the participant information sheet and consent form:**

Participant information, debriefing and consent sheets / forms are well thought through and sensitive to the impact this proposed research may have on participants.

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I would also like to draw your attention to the impact of offering participants the right to withdraw their data at any time. While acceptable in many quantitative studies, withdrawing qualitative data once it has been subject to analysis is complex and may undermine the whole project. It may also be impossible to do in practice.

Do you need to offer participants a deadline up until which they can withdraw their data but after which they cannot for valid methodological reasons?

You may also want to amend your proposed IRAS research time line before it goes to IRAS for review.

**3. Recommendation:**

(Please indicate as appropriate and advise on any conditions. If there are any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer).

☐

Approved - no conditions attached

☒

Approved with minor conditions (no need to resubmit)

☐

Conditional upon the following – please use additional sheets if necessary (please re-submit)

☐

Rejected for the following reason(s) – please use other side if necessary

☐

Further advice/notes - please use other side if necessary

**Name of reviewer:** Dr Adrian Neal

**Signature:** .....

**Date:** 16/05/2011



## **Appendix 15: Coventry University Liability Certificate**

## CERTIFICATE OF EMPLOYERS' LIABILITY INSURANCE (a)

*(Where required by regulation 5 of the Employers' Liability (Compulsory Insurance) Regulations 1998 (the Regulations), one or more copies of this certificate must be displayed at each place of business at which the policy holder employs persons covered by the policy)*

1. Name of policy holder Policy No **Y016796QBE0110A**  
**Coventry University, Coventry University Enterprises, Acua Limited and Coventry University London Campus Limited**

2. Date of commencement of insurance policy **01/08/2010**

3. Date of expiry of insurance policy **31/07/2011**

We hereby certify that subject to paragraph 2:

1. the policy to which this certificate relates satisfies the requirements of the relevant law applicable in Great Britain, Northern Ireland, Isle of Man, Island of Jersey, Island of Guernsey, Island of Alderney; or any offshore installations in territorial waters around Great Britain and its Continental Shelf **(b)**: and;
2. (a) the minimum amount of cover provided by this policy is no less than £5 million **(c)**; or  
~~(b) the cover provided under this policy relates to claims in excess of [£ ] but not exceeding [£ ].~~
3. the policy covers the holding company and all its subsidiaries

Signed on behalf of QBE Insurance (Europe) Limited and QBE Casualty Syndicate 386 (Authorised Insurers)



### Notes

- (a)** *Where the employer is a company to which regulation 3(2) of the Regulations applies, the certificate shall state in a prominent place, either that the policy covers the holding company and all its subsidiaries, or that the policy covers the holding company and all its subsidiaries except any specifically excluded by name, or that the policy covers the holding company and only the named subsidiaries.*
- (b)** *Specify applicable law as provided for in regulation 4(6) of the Regulations.*

### Important

The Employers' Liability (Compulsory Insurance) Regulations 1998 requires that you keep this certificate or a copy for at least 40 years. Extra copies of the certificate will be supplied upon request.

The Insurers' obligations under this policy are several and not joint and are limited solely to the extent of their individual subscriptions. Please see the policy for full details.

**QBE Insurance (Europe) Limited**, Plantation Place, 30 Fenchurch Street, London, EC3M 3BD - Registered in England No. 1761561  
Authorised and Regulated by the Financial Services Authority – Registration Number 202842

**QBE Casualty Syndicate 386** managed by **QBE Underwriting Limited**, Plantation Place, 30 Fenchurch Street, London, EC3M 3BD  
Registered in England No. 01035198 Authorised and Regulated by the Financial Services Authority – Registration Number 204858

(c) See regulation 3(1) of the Regulations and delete whichever of paragraphs 2(a) or 2(b) does not apply. Where 2(b) is applicable, specify the amount of cover provided by the relevant policy.

**Important**

The Employers' Liability (Compulsory Insurance) Regulations 1998 requires that you keep this certificate or a copy for at least 40 years.  
Extra copies of the certificate will be supplied upon request.

The Insurers' obligations under this policy are several and not joint and are limited solely to the extent of their individual subscriptions. Please  
see the policy for full details.

**QBE Insurance (Europe) Limited**, Plantation Place, 30 Fenchurch Street, London, EC3M 3BD - Registered in England No. 1761561  
Authorised and Regulated by the Financial Services Authority – Registration Number 202842

**QBE Casualty Syndicate 386** managed by **QBE Underwriting Limited**, Plantation Place, 30 Fenchurch Street, London, EC3M 3BD  
Registered in England No. 01035198 Authorised and Regulated by the Financial Services Authority – Registration Number 204858

## **Appendix 16: Black Country Research Ethics Committee Letter of Approval**



**NRES Committee West Midlands - The Black Country**

Prospect House  
Fishing Line Road  
Redditch  
Worcestershire  
B97 6EW

Telephone: 01527 582535

12 July 2011

Miss Victoria R Magrath  
Doctorate of Clinical Psychology  
Coventry University, Priory Street  
Coventry  
CV1 5FB

Dear Miss Magrath

**Study title:** The personal experience of Eating Distress in the context of a history of Trauma: A Phenomenological Analysis.  
**REC reference:** 11/WM/0185

The Research Ethics Committee reviewed the above application at the meeting held on 04 July 2011. Thank you for attending to discuss the study.

**Ethical opinion**

- The Committee asked if the greeting in the Invitation letter could be changed from 'Dear Participant'. You said she could use 'Dear Client'.
- The Committee noted that the phrase 'lived experience' is not appropriate. You said you would change this to 'experience'.
- The Committee asked how distress would be handled. You said they would provide support in the moment. The clients can say when they do not want to answer certain questions. Many will have already been through a similar process. 'Eating Disorder clinicians will be on hand as interviews are in the NHS building. Crisis team and main clinician contacts will be given after the interviews.

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

**Ethical review of research sites**

**NHS Sites**

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

## Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

*Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.*

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.

*Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.*

*For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.*

*Sponsors are not required to notify the Committee of approvals from host organisations*

## **Additional Conditions**

- 1) Change the greeting on the Invitation Letter to 'Dear Client'
- 2) In the Invitation Letter change 'lived experience' to 'experience'
- 3) State that the Black Country REC reviewed the study.

**It is responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

**You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Confirmation should also be provided to host organisations together with relevant documentation**

## **Approved documents**

The documents reviewed and approved at the meeting were:

Document	Version	Date
Covering Letter		27 May 2011
Interview Schedules/Topic Guides	1.0	24 May 2011
Investigator CV		
Other: Ethics Review Feedback Form		16 May 2011
Other: Superviosr - Dr Liebling-Kalifani CV	1	24 May 2011
Other: Invitation Letter	1.0	24 May 2011
Other: Letter from Sponsor		25 May 2011
Other: Certificate of Employers' Liability Insurance		01 August 2010
Participant Consent Form	1.0	24 May 2011

Participant Information Sheet	1.0	24 May 2011
Participant Information Sheet: Debriefing	1.0	24 May 2011
Protocol	1.0	24 May 2011
REC application		24 May 2011

### Membership of the Committee

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

### Statement of compliance

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

### After ethical review

#### Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

#### Feedback

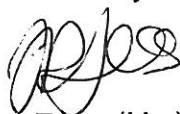
You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

<b>11/WM/0185</b>	<b>Please quote this number on all correspondence</b>
-------------------	---

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

Yours sincerely



Jenny Tyers (Mrs) for and on behalf of  
**Dr Jeff Neilson**  
**Chair**

Email: jenny.tyers@westmidlands.nhs.uk

*Enclosures:*                      *List of names and professions of members who were present at the*

*meeting and those who submitted written comments*  
*"After ethical review – guidance for researchers"*

Copy to:

*Dr Kelly Spencer*  
*West Midlands (South) Comprehensive Local Research Network*  
*Fourth Floor Rotunda (ADA40017)*  
*UHCW, Clifford Bridge Road*  
*Coventry*  
*CV2 2DX*

*Dr Helen Liebling-Kalifani*  
*Doctorate of Clinical Psychology*  
*Coventry University, Priory Street*  
*Coventry*  
*CV1 5FB*



## NRES Committee West Midlands - The Black Country

Attendance at Committee meeting on 04 July 2011

### Committee Members:

<i>Name</i>	<i>Profession</i>	<i>Present</i>	<i>Notes</i>
Dr Joseph Arumainayagam	Consultant and Honorary Senior Clinical Lecturer in HIV and GUM	Yes	
Mrs Chris Bell	Lay Member	No	
Dr N Erb	Consultant Rheumatologist	Yes	
Mr Chris Foy	Medical Statistician	Yes	
Dr Jeff Neilson	Consultant Haematologist	Yes	
Dr Hilary Paniagua	Chair of the research ethics committee, School of Health and Wellbeing, Wolverhampton Un	Yes	
Mr Nanak Singh Sarhadi	Consultant Plastic Surgeon	Yes	
Dr Julian Sonksen	Consultant in Anaesthesia and Critical Care	No	
Mrs Jenny Tyers	Assistant Co-ordinator	Yes	
Dr David Vallance	Clinical Biochemist	Yes	
Mrs Jennifer Walton	Retired Research Nurse	No	
Mrs Veronica A Wells	Lay Member	Yes	
Dr Tony Zalin	Lay Member	No	



## **Appendix 17: Coventry and Warwickshire Research & Development Letter of Approval**

West Midlands (South) Comprehensive Local Research Network  
Fourth Floor, West Wing (ACF40002)  
University Hospitals Coventry & Warwickshire NHS Trust  
University Hospital  
Clifford Bridge Road  
Coventry  
CV2 2DX

9<sup>th</sup> August 2011

Miss Victoria Magrath  
Trainee Clinical Psychologist  
Coventry and Warwickshire Partnership Trust  
St. Michael's Hospital  
Cape Road  
Warwick  
CV34 5QW

Dear Victoria

**Project Title: The personal experience of Eating Distress in the context of a history of Trauma: A Phenomenological Analysis**  
**R&D Ref: PAR260511**  
**REC Ref: 11/WM/0185**

I am pleased to inform you that the R&D review of the above project is complete, and the project has been formally approved to be undertaken at Coventry and Warwickshire Partnership NHS Trust. Your research activity is now covered by NHS indemnity as set out in HSG (96) 48, and your trial has been entered onto the Trust's database.

The following documents were reviewed:

Document	Version	Date
NHS R&D Application Form	73906/218535/14/407	27/05/11
NHS Site Specific Information Form	73906/218539/585/94750/214363	27/05/11
REC Favourable Opinion Letter	-	12/07/11 and 29/07/11
Protocol	1.0	24/05/11
Participant Information Sheet	2.0	24/07/11
Letter of Invitation to participant	2.0	24/05/11
Interview Schedules/Topic Guides	1.0	24/05/11
Participant Information Sheet-Debriefing	1.0	24/05/11
Participant Consent Form	1.0	24/05/11
Letter from Sponsor	-	25/05/11
Investigator CV	-	-

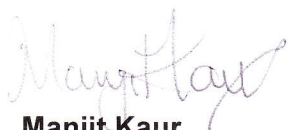
Your responsibilities are set out in the attached agreement, which must be signed and returned to the R&D Office. You should keep a copy for your records.

All research must be managed in accordance with the requirements of the Department of Health's Research Governance Framework (RGF) and to ICH-GCP standards. In order to ensure that research is carried out to these standards, the Trust employs the services of an external monitoring organisation to provide assurance. Your study may be randomly selected for audit at any time, and you must co-operate with the auditors.

The duration of Trust approval extends to the date specified in the R&D application form. Action may be taken to suspend Trust approval if the research is not run in accordance with RGF or ICH-GCP standards, or following recommendations from the auditors. Research must commence within two years of the REC approval date and within six months of NHS Permission. Coventry University have agreed to act as the sponsor for the above study and as such have arrangements in place for insurance and/or indemnity to meet the potential legal liability of the sponsor for harm to participants arising from the management and design of the research,

I wish you well with your project. Please do not hesitate to contact me should you need any guidance or assistance.

Yours sincerely



**Manjit Kaur**  
**R&D Facilitator**

**Cc:**

Professor Ian Marshall, Sponsor  
Dr Helen Liebling-Kalifani, Supervisor

## **Appendix 18: BEAT Ethical Approval Letter**

Victoria Magrath  
Doctorate in Clinical Psychology  
James Starley Building  
Coventry Uni  
Priory Street  
Coventry  
CV1 5FB

22<sup>nd</sup> December 2011

To whom it may concern,

Please accept this letter as confirmation that Beat agreed to advertise Victoria Magrath's research through our website and database of contacts in accordance with our procedures.

Yours faithfully,



Nicole Albutt

Research Officer  
Beat  
[n.albutt@b-eat.co.uk](mailto:n.albutt@b-eat.co.uk)  
01603 753337

## **Appendix 19: Notes to Contributor- Journal of Clinical Psychology**

### **Author Guidelines**

#### **NIH Public Access Mandate**

For those interested in the Wiley-Blackwell policy on the NIH Public Access Mandate, [please visit our policy statement](#)

**Author Services – Online production tracking is now available for your article through Wiley-Blackwell's Author Services.** Author Services enables authors to track their article - once it has been accepted - through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated emails at key stages of production. The author will receive an email with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete email address is provided when submitting the manuscript. Visit <http://authorservices.wiley.com> for more details on online production tracking and for a wealth of resources including FAQs and tips on article preparation, submission and more.

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2. Go to the URL <http://mc.manuscriptcentral.com/jclp>
3. Register (if you have not done so already).
4. Go to the Author Center and follow the instructions to submit your paper.
5. Please upload the following as separate documents: the title page (with identifying information), the body of your manuscript (containing no identifying information), each table, and each figure.
6. Please note that this journal's workflow is double-blinded. Authors must prepare and submit files for the body of the manuscript that are anonymous for review (containing no name or institutional information that may reveal author identity).
7. All related files will be concatenated automatically into a single .PDF file by the system during upload. This is the file that will be used for review. Please scan your files for viruses before you send them, and keep a copy of what you send in a safe place in case any of the files need to be replaced.

Timothy R. Elliott, Editor-in-Chief  
The Journal of Clinical Psychology  
4225 TAMU  
Texas A&M University



College Station, TX 77843-4225  
Email: [timothyrelliott@tamu.edu](mailto:timothyrelliott@tamu.edu)

**All *Journal of Clinical Psychology: In Session* articles are published by invitation only. Individuals interested in nominating, organizing, or guest editing an issue are encouraged to contact the editor-in-chief:**

**John C. Norcross, Ph.D.**  
**Department of Psychology**  
**University of Scranton**  
**Scranton, PA 18510-4596**  
**E-mail: [norcross@scranton.edu](mailto:norcross@scranton.edu)**

### **Manuscript Preparation**

**Format**. Number all pages of the manuscript sequentially. Manuscripts should contain each of the following elements in sequence: 1) Title page 2) Abstract 3) Text 4) Acknowledgments 5) References 6) Tables 7) Figures 8) Figure Legends 9) Permissions. Start each element on a new page. Because the *Journal of Clinical Psychology* utilizes an anonymous peer-review process, authors' names and affiliations should appear ONLY on the title page of the manuscript. Please submit the title page as a separate document within the attachment to facilitate the anonymous peer review process.

**Style**. Please follow the stylistic guidelines detailed in the *Publication Manual of the American Psychological Association, Sixth Edition*, available from the American Psychological Association, Washington, D.C. *Webster's New World Dictionary of American English, 3rd College Edition*, is the accepted source for spelling. Define unusual abbreviations at the first mention in the text. The text should be written in a uniform style, and its contents as submitted for consideration should be deemed by the author to be final and suitable for publication.

**Reference Style and EndNote**. EndNote is a software product that we recommend to our journal authors to help simplify and streamline the research process. Using EndNote's bibliographic management tools, you can search bibliographic databases, build and organize your reference collection, and then instantly output your bibliography in any Wiley journal style. *Download Reference Style for this Journal*: If you already use EndNote, you can [download the reference style](#) for this journal. *How to Order*: To learn more about EndNote, or to purchase your own copy, [click here](#). *Technical Support*: If you need assistance using EndNote, contact [endnote@isiresearchsoft.com](mailto:endnote@isiresearchsoft.com), or visit [www.endnote.com/support](http://www.endnote.com/support).

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highlight the subject matter of the article. Please submit the title page as a separate document within the attachment to facilitate the anonymous peer review process.

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**Final Revised Manuscript.** A final version of your accepted manuscript should be submitted electronically, using the instructions for electronic submission detailed above.

**Artwork Files.** Figures should be provided in separate high-resolution EPS or TIFF files and should not be embedded in a Word document for best quality reproduction in the printed publication. Journal quality reproduction will require gray scale and color files at resolutions yielding approximately 300 ppi. Bitmapped line art should be submitted at resolutions yielding 600-1200 ppi. These resolutions refer to the output size of the file; if you anticipate that your images will be enlarged or reduced, resolutions should be adjusted accordingly. All print reproduction requires files for full-color images to be in a CMYK color space. If possible, ICC or ColorSync profiles of your output device should accompany all digital image submissions. All illustration files should be in TIFF or EPS (with preview) formats. Do not submit native application formats.

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- **Research Articles.** Research articles may include quantitative or qualitative investigations, or single-case research. They should contain Introduction, Methods, Results, Discussion, and Conclusion sections conforming to standard scientific reporting style (where appropriate, Results and Discussion may be combined).

- **Review Articles**. Review articles should focus on the clinical implications of theoretical perspectives, diagnostic approaches, or innovative strategies for assessment or treatment. Articles should provide a critical review and interpretation of the literature. Although subdivisions (e.g., introduction, methods, results) are not required, the text should flow smoothly, and be divided logically by topical headings.
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- **Commentaries**. Occasionally, the editor will invite one or more individuals to write a commentary on a research report.
- **Editorials**. Unsolicited editorials are also considered for publication.
- **Notes From the Field**. Notes From the Field offers a forum for brief descriptions of advances in clinical training; innovative treatment methods or community based initiatives; developments in service delivery; or the presentation of data from research projects which have progressed to a point where preliminary observations should be disseminated (e.g., pilot studies, significant findings in need of replication). Articles submitted for this section should be limited to a maximum of 10 manuscript pages, and contain logical topical subheadings.
- **News and Notes**. This section offers a vehicle for readers to stay abreast of major awards, grants, training initiatives; research projects; and conferences in clinical psychology. Items for this section should be summarized in 200 words or less. The Editors reserve the right to determine which News and Notes submissions are appropriate for inclusion in the journal.

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## **Appendix 20: Notes to Contributor- International Journal of Eating Disorders**

### **Author Guidelines**

#### **NIH Public Access Mandate**

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#### Submission

##### Preparation of Manuscript

(1) Title page

(2) Abstract

(3) Text

(4) References

(5) Appendixes

(6) Footnotes

(7) Tables

(8) Figure captions

##### Manuscript Form and Presentation

##### Copyediting Guideline

##### OnlineOpen

##### Proofs

##### Production Questions

### **Submission**

To submit your manuscript online, please:

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Manuscripts are evaluated by one to three members of the Editorial Board, or outside reviewers selected by the Editor. Accepted manuscripts become the permanent property of The International Journal of Eating Disorders and cannot be printed elsewhere without prior permission of the publisher.

### **Preparation of Manuscript**

Number all pages of the manuscript except the figures (including title page and abstract) consecutively. Parts of the manuscripts should be arranged in the following sequence:

**(1) Title page.** (numbered 1) should include the full names, titles, and affiliations of all authors, and an abbreviated title (Running Head) that should not exceed 50 characters, counting letters, spacing, and punctuation. This Running Head should be typed in upper case letters centered at the bottom of the title page. Each page of the manuscript (excluding figures) should be identified by typing the first two or three words of the full title in the upper right-hand corner above the page number.

**(2) Abstract.** (150-word maximum) should be started on a separate page, numbered 2. Type the word "Abstract" in upper and lower case letters, centered at the top of page 2. Authors of articles submitted to the Journal involving research data or reviews of the literature must now include the following information in the form of a structured abstract, under the headings indicated. The abstract should be typed as a single paragraph on one page: **Objective:** briefly indicate the primary purpose of the article, or major question addressed in the study. **Method:** indicate the sources of data, give brief overview of methodology, or, if review article, how the literature was searched and articles selected for discussion. For research based articles, this section should briefly note study design, how subjects were selected, and major outcome measures. **Results:** summarize the major or key findings. **Discussion:** indicate main clinical, theoretical, or research applications/implications. The *Journal* will continue to use unstructured abstracts for case reports.

**(3) Text.** Begin the text on page 3 and be sure to identify each page with the short title typed in the upper right-hand corner above the page number. Type the full title of the manuscript centered at the top, and then begin the text. The full title appears

on page 3 only. Indent all paragraphs. While there is no maximum length for article submissions it is advisable that research be conveyed as concisely as possible.

**(4) References.** Begin on separate page, with the word "References" typed in upper and lower case letters, centered at the top of the page.

**(5) Appendixes.** Typed each appendix on a separate page labeled "Appendix A, B", etc., in the order in which they are mentioned in the text.

**(6) Footnotes.** Start on separate page.

**(7) Tables.** Tables should be double-spaced, including all headings, and should have a descriptive title. If a table extends to another page, so should all titles and headings. Each table should be numbered sequentially in Arabic numerals and begin on a new page. Be sure to explain abbreviations in tables even if they have already been explained in-text. Consider the tables and figures to be self-contained and independent of the text. They should be interpretable as stand-alone entities.

**(8) Figure captions.** Start on separate page. Each figure caption should have a brief title that describes the entire figure without citing specific panels, followed by a description of each panel. Figure captions should be included in the submitted manuscript as a separate section. Be sure to explain abbreviations in figures even if they have already been explained in-text. Consider the tables and figures to be self-contained and independent of the text. They should be interpretable as stand-alone entities. Axes for figures must be labeled with appropriate units of measurement and description.

## **Manuscript Form and Presentation**

All manuscripts are subject to copyediting, although it is the primary responsibility of the authors to proofread thoroughly and insure correct spelling and punctuation, completeness and accuracy of references, clarity of expression, thoughtful construction of sentences, and legible appearance prior to the manuscript's submission. Preferred spelling follows *Webster's New Collegiate Dictionary* or *Webster's Third New International Dictionary*. The manuscript should conform to accepted English usage and syntax.

Microsoft Word is the preferred format for the creation of your text and tables (one file with tables on separate pages at the end of your text). Refrain from complex formatting; the Publisher will style your manuscript according to the Journal design specifications. Do not use desktop publishing software such as Aldus PageMaker or Quark XPress.

Use headings to indicate the manuscript's general organization. Do not use a heading for the introduction. In general, manuscripts will contain one of several levels of headings. Centered upper case headings are reserved for Methods, Results, and Discussion sections of the manuscript. Subordinate headings (e.g., the Subjects or Procedure subsection of Methods) are typed flush left, underlined, in upper case and lower case letters. The text begins a new paragraph.

**Presenting statistical data in text:** For additional detail regarding statistical requirements for the manuscript see [IJED Statistical Formatting Requirements](#). For more detailed background information on statistical analyses and their rationale authors are referred to [IJED Statistical Reporting Guidelines](#).

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Referencing follows the Vancouver method of reference citation. In this system, references are numbered consecutively in the order in which they are first mentioned in the text. Identify each reference in text, tables, and legends by Arabic numbers. All references cited should be listed numerically at the end of the paper. Prepare citations according to the style used in Index Medicus and the International list of periodical title word abbreviations (ISO 833).

All reference citations in the text should appear in the reference list. When there are less than seven authors, each must be listed in the citation. When seven or more authors, list the first six followed by et al. after the name of the sixth author.

Representative examples are as follows:

**Journal Article:** 1. Endicott J, Spitzer RL. A diagnostic interview: The schedule for affective disorders and schizophrenia. Arch Gen Psychiatry 1978;35:837-844.

**Book Chapter:** 2. Fairburn CG, Cooper Z. The eating disorders examination (12th ed). In: Fairburn CG, Wilson GT, editors. Binge eating: nature, assessment, and treatment. New York: The Guilford Press, 1993, p. 317-331.

**Book:** 3. Tudor I. Learner-centeredness as language education. Cambridge: Cambridge University Press; 1996.

**Preparation of figures.** To ensure the highest quality print production, your figures must be submitted in TIFF format according to the following minimum resolutions:

- 1200 dpi (dots per inch) for black and white line art (simple bar graphs, charts, etc.)
- 300 dpi for halftones (black and white photographs)
- 600 dpi for combination halftones (photographs that also contain line art such as labeling or thin lines)

Vector-based figures (usually created in Adobe Illustrator) should be submitted as EPS. Do not submit figures in the following formats: JPEG, GIF, Word, Excel, Lotus 1-2-3, PowerPoint, PDF.



Graphs must show an appropriate grid scale. Each axis must be labeled with both the quantity measured and the unit of measurement. Color figures must be submitted in a CMYK colorspace. Do not submit files as RGB. All color figures will be reproduced in full color in the online edition of the journal at no cost to authors. Authors are requested to pay the cost of reproducing color figures in print. Authors are encouraged to submit color illustrations that highlight the text and convey essential scientific information. For best reproduction, bright, clear colors should be used.

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## **PROPOSED ADDITIONAL GUIDELINES FOR COPYEDITING OF MANUSCRIPTS FOR INTERNATIONAL JOURNAL OF EATING DISORDERS**

The *Journal* Editor and Associate Editors propose additional guidelines for manuscript copyediting in order to enhance consistency in the organization of printed material, and to bring *IJED* style in line with other major scientific publications. The key elements follow.

1. Each structured abstract should consistently use these subheadings (at present, the headings vary somewhat from article to article): Objective, Method, Results, Discussion.
2. Many of our Authors use terms such as “anorexics” or “bulimics” as personal pronouns, referring to groups of individuals by their common diagnosis. Henceforth, these terms should be replaced with more neutral language, as for example: “individuals with anorexia nervosa”, “patients with bulimia nervosa”, or “participants with eating disorders”.
3. In the Methods section, the subheading “Subjects” should now be replaced with the subheading “Participants”, and this term should be used in place of “subjects” throughout the text.
4. Standard rules will continue to govern the use of capitalization in Headings and Subheadings. However, when a minor word in a Heading or Subheading actually has special or unique meaning, the rule should be overridden.
5. When referring to gender, “males and “females” should be used in cases where the study samples include both children (below age 18) and adults; when the participants comprise adults only, the terms “men” and “women” should be used. In articles that refer to children (i.e., below the age of 13), “boys” and “girls” should be used.
6. In articles that refer to genetic material, the names of genes should be spelled out in full the first time they appear in the text, after which an italicized abbreviation can be substituted.
7. The word “data” is plural so text should follow accordingly; for example, “The data show...the data are ... the data were”.

8. When an article references another article that appears in the very same issue of the *Journal*, (such occurrences are most likely in Special Issues), the citation will be updated by the copyeditor (i.e., volume number and pagination will be substituted for “in press”).

9. For information on how to present *p* values and other standard measurements see [IJED Statistical Formatting Requirements](#).

10. The Methods section should include a statement that the research was reviewed and approved by an institutional review board.

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